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LACE-BUG GENERA OF THE WORLD
(HEMIPTERA: TINGIDAE)¹

By CARL J. DRAKE AND FLORENCE A. RUHOFF

Introduction

A treatise of the generic names of the family Tingidae from a global standpoint embodies problems similar to those frequently encountered in corresponding studies in other animal groups. The more important criteria, including such basic desiderata as fixation of type species, synonyms, priority, and dates of technical publications implicate questions concomitant with recent trends toward the clarification and stabilization of zoological nomenclature.

Zoogeography, predicated and authenticated on the generic level by the distribution of genera and species, is portrayed here by means of tables, charts, and maps of the tingifauna of the world. This visual pattern of distribution helps one to form a more vivid concept of the family and its hierarchic levels of subfamilies and genera. To a limited extent the data indicate distributional concentrations and probable centers of evolution and dispersal paths of genera. The phylogenetic relationship of genera is not discussed.

The present treatise recognizes 216 genera (plus 79 synonyms, homonyms, and emendations) of the Tingidae of the world and gives

¹ Research for this paper was supported in part by the National Science Foundation, grant No. 4095.

the figure of 1,767 as the approximate number of species now recognized. These figures, collated with similar categories in Lethierry and Severin (1896), show that there has been an increase of many genera and hundreds of species of Tingidae during the past three-quarters of a century. And as attested by the number of new forms being described each year in technical publications, there are still many unknown genera and many more new species yet to be discovered.

The three subfamilies of the Tingidae are listed in alphabetic sequence. The genera and subgenera (including synonyms, homonyms, emendations, misapplied names, misspellings, nomina nuda (sine species), lapsus calami, and errata) are also alphabetized under their respective subfamilies. Although absolute completeness and perfection are unattainable, every effort has been taken to formulate a complete registry of all generic and subgeneric names, both valid and invalid, heretofore proposed in the literature for both existing and fossil tingids. Each reference has been checked against the original publication. Thus, a number of errors that have crept into the literature have been rectified.

The authors hope that the users of this work will make known typographical, technical, and other errors so that corrections may be made in the catalog of the Tingidae of the world, now in preparation.

Often it has been difficult to accredit with any degree of certainty the first authority accountable for synonymy, subsequent type designation of a genus, and other taxonomic changes. When such information was not so expressed in the literature, the oldest ascertainable record of the action has been cited as the authoritative citation.

Accepted or valid generic and subgeneric names are printed in boldface type; the invalid or unacceptable names are in lightface type. Cross-references are provided to link every synonym, homonym, emendation, unaccepted name, and error of any type to the proper taxon.

The name of each genus, subgenus, and type species is followed by the name of author with date and page reference, thus providing identification in the list of literature cited. "Later citation" as used herein refers to authors who have correctly cited the type species after its fixation; a "previous selection" is a citation made prior to the official list of the International Commission on Zoological Nomenclature but is in agreement with that list; "erroneous or invalid citations" are explained under the respective genera.

In searching for new generic records and other taxonomic changes, the reader should begin with volume 93 of the Zoological Record (1956).

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ERRATA

- Page 18, fourth name in list: change Pseudodacysta to read Pseudacysta.
- Page 24, line 26: change Jelsupi to read lepeupi.
- Page 25, line 36: change vanderstyti to read vanderysti.
- Page 32, line 6: change amigera to read armigera.
- Page 32, line 18: change apicicornis to read apicornis.
- Page 40, line 15: change wuerontausi to read wuorentausi.
- Page 57, line 38: change Frucilliger to read Furcilliger.
- Page 63, line 23: change hedenborgi to read hedenborgii.

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Family TINGIDAE Laporte ²

MEMBRANACEAE Latreille, 1825, pp. 415, 422.

TINGIDITES Laporte, 1833, p. 47.

MEMBRANACEI Burmeister, 1835, p. 249

TINGINI Costa, 1838, p. 20.

TINGIDAE Westwood, 1840, p. 120.—Costa, 1855, p. 293.—Lethierry and Severin, 1896, p. 1.—Hurd, 1946, p. 437.—Monte, 1947, p. 2.—China, 1955, p. 261.

TINGIDES Amyot and Serville, 1843, pp. 285, 295.

TINGIDEAE Fieber, 1844, pp. 20, 27.

DUCTIROSTRI Sahlberg, 1848, pp. 125, 127.

TINGIDITAE Spinola, 1850, p. 27.

TINGIDIDEA Fieber, 1851, p. 9.—Flor, 1860, p. 317.—Vollenhoven, 1878, p. 265.

TINGITIDEA Costa, 1860, p. 6.

TINGIDIDAE Fieber, 1861, p. 26.—Oshanin, 1908, p. 395.—Van Duzee, 1916, p. 25; 1917, p. 209.

TINGIDIDA Stål, 1865, p. 25.

TINGINA Stål, 1870, p. 671.

TINGITIDAE Stål, 1873, p. 115.—Uhler, 1886, p. 21.—Horváth, 1906c, p. 1; 1911, p. 14.—Oshanin, 1912, p. 42.—Drake and Poor, 1936a, p. 382.—China, 1943, p. 245.

² The 15th International Congress of Zoology (London, 1958) made provisos for the acceptance of family names originally founded in the vernacular—such as Tingidites Laporte (1833) in French—providing such usage has been generally accepted. Since Tingidae (for "Tingidites") meets the new code of Zoological Nomenclature, we are accrediting "Tingidae" to Laporte, who was the first to use a family name for the lace-bugs. It should be noted that all technical and vernacular names for the family always have been based upon the generic name of *Tingis* Fabricius.

TINGITIDES Puton, 1875, p. 28; 1899, p. 38.

TINGIDIDES Vollenhoven, 1878, p. 9.

TYPE GENUS: *Tingis* Fabricius (1803, p. 224).

The family Tingidae comprises a moderately large assemblage of insects ranging rarely more than 2-5 mm. in length. The species are entirely plant-feeders, and both adults and nymphs obtain food by sucking out the juices from the cells of the tissues within the living plants. At times they occur in sufficient numbers to constitute an important plant-pest.

Adults and offspring live on the underside of the leaves of the host plants. Their presence soon betrays itself by the appearance of whitish and discolored spots on the upperside of the leaves just above the place of feeding. Many species are gregarious and both adults and nymphs cluster near the spot where the eggs were laid. The life-cycle is relatively short, two or more generations usually being passed during the growing season. Metamorphosis, called hemimetabola, is gradual.

Many different kinds of wild and cultivated plants serve as feeding and breeding hosts. Among the common economic hosts might be mentioned such plants as cotton, sugarcane, eggplant, cassava, rubber, pear, apple, cherry, avocado, almond, tea, coffee, banana, cacao, coconut, camphor, black pepper, and olive. Shade and forest trees, shrubs, herbs, grasses, and decorative plants also serve as primary hosts. Mosses, too, are inhabited. Members of three genera found in Africa, Australia, Asia, and southern Europe are typical gall-forming insects. Distribution, except for the lands of the Arctic and Antarctic Zones, is practically worldwide.

As a familial group, tingids are separated from almost all other families³ of the order Hemiptera by the intricate pattern of delicate lacework occurring all over the processes of the pronotum and of the fore pair of wings. On account of their lacy appearance, tingids are known globally by the same colloquial name, "lace-bugs," and once seen they are thus easily recognized. The immature stages are often adorned with long, plain or modified spines, only the adults being clothed with lacework in different specific patterns.

The question is frequently asked, "What is the use or function, if any, of the lacy dorsal covering of tingids?" Perhaps it is for protective concealment. For similar reasons man himself makes use of "nets" or "screens" of various kinds to conceal or camouflage strategic objects from the eyes of enemies, especially from the air. Color and markings also enter into the picture.

³ Members of the hemipterous families Piesmatidae and Peloridiidae also have the dorsal surface of their bodies composed of lacework, but phylogenetically neither is very closely allied to Tingidae or to each other.

In the subfamily Tinginae, members of many genera at times are said to “run wild” structurally in the development of unique and fanciful forms of specific designs in lacework. The pepper tingid (fig. 1) of the South Pacific is only one of hundreds of such creations. Many species in other genera are at least just as ornately clothed and befittingly decorated in singular lacy structures. There are no replicas nor facsimiles among species, because each species possesses its own form, pattern, and style of lacework. Both generic and specific characters used in the identification of lace-bugs are based largely upon lacy structures. Only with the aid of illustrations can such unequalled oddities of intricate lacework be described adequately for taxonomic studies.

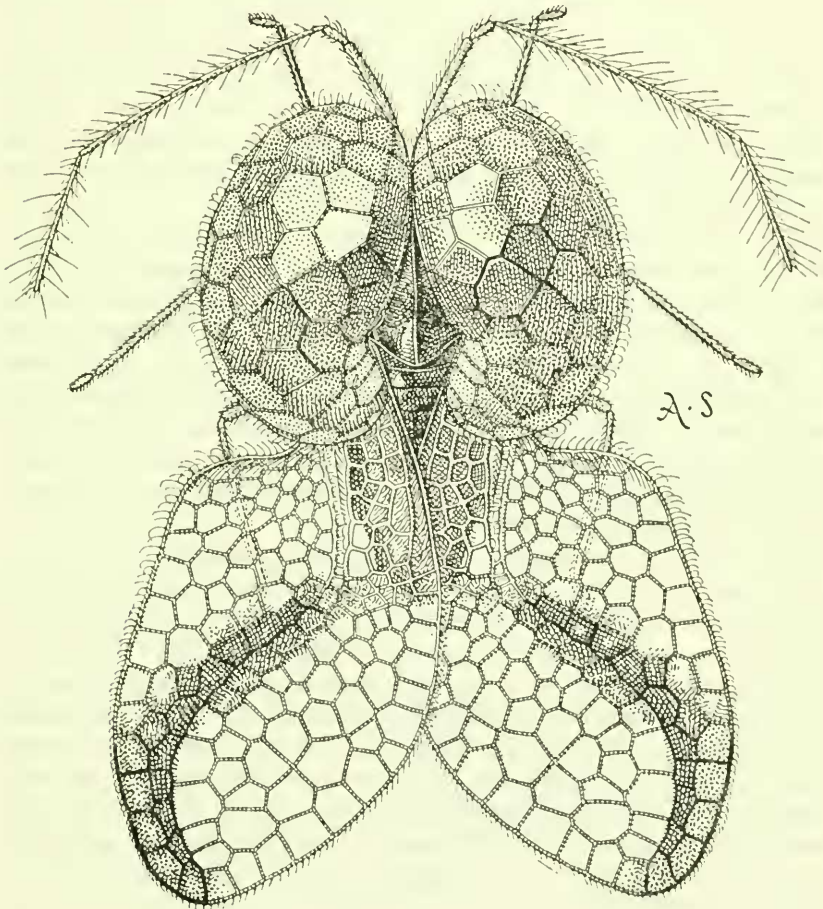


FIGURE 1.—*Nesocypselas piperica* Drake, the black pepper lace bug.

Hemipterists are almost entirely of the opinion that the families Tingidae and Piesmatidae are not very closely related and thus together did not form a natural higher taxon. According to a recent paper by Drake and Davis (1958, p. 572), evidences from external morphology and reproductive organs of males and females of the two families do not substantiate the retention of the superfamily Tingoidea for these families. Consequently, those authors suppressed the superfamily as then constituted.

The myrmecophile family Vianaididae was erected by Kormilev (1955, p. 465-477) to hold a new genus and new species, *Vianaida coleopterata* Kormilev, and another monobasic genus, *Anommotocoris minutissimus* China (1945, pp. 126-128) described from Trinidad, British West Indies. As the families Tingidae and Vianaididae are without ventral trichobothria and both belong to the group Cimicomorpha of Leston, Pendergrast, and Southwood (1954, pp. 91-94), Kormilev suggested that these two families may be consociates so as to form a superfamily Tingidoidea (sensu novum). The relationship of these families and the status of the proposed superfamily "Tingidoidea" (proper spelling should be Tingoidea) are now being critically studied and will be discussed in a subsequent paper dealing with the morphology and higher classification of Tingidae.

Except for the characterization of many new genera and several hundred species, tingids have received scant attention for many decades in the taxonomic hierarchy of higher categories ascending from the generic to ordinal rank. Obviously the subfamilies and particularly some of the larger polytypic genera (*Tingis*, *Leptopharsa*, and *Cysteocheila*, for examples) need more thorough analyses, both objectively and subjectively, from a worldwide aspect so that such heterogenous taxa can be better understood and especially delimited. Their constituents can then be more concretely tied into the generic concept of their respective type species.

The progenitors and other pioneer genera at times have served as temporary repositories ("catch-alls") for many new species of doubtful or even unknown generic affinities ever since the days of Linnaeus and Fabricius. For example, the genera *Phyllontocheila* and *Monanthia*, both recently buried in synonymy, formed generic anchors for the erection of a number of subgenera which have been withdrawn for elevation to the generic level. An examination of the specific names also reveals that more than 100 species of tingids originally described as *Monanthia* have been transferred to other, sometimes newly created, genera. Several genera now recognized as valid, such as *Tingis*, *Cysteocheila*, and *Leptopharsa*, still hold some species of doubtful generic affinities.

In the only catalog so far published on the Hemiptera (Heteroptera;

Miridae not included) of the world, Lethierry and Severin (1896, pp. 4-26) recorded a total of only 50 genera and 317 species of Tingidae for all five continents and the islands of the seas. Forty years later, Drake and Poor (1936a, p. 381) enumerated 52 genera from the Western Hemisphere alone. The latter authors also stated that 424 species had been described from the Americas and estimated that approximately 1,100 species were then characterized in the world. Monte (1947) published a list (incomplete) of 99 tingid genera (including synonyms) and their respective type species for the world.

Two basic and monumental treatises have been written on the family Tingidae. Horváth (1906c) published a very comprehensive study of the Tingidae of the Palearctic subregion, with original keys to genera and species. He recognized 19 valid genera and 201 valid species for the Palearctic subregion. Hurd (1946) published descriptions and original keys to the 44 genera known to occur in North America. This author gave the figure 424 as the number of known species at that time inhabiting the Americas north of the Panama Canal.

Inasmuch as the foregoing papers dealt with land areas of various extents, involving diverse biotic conditions and even overlapping faunal regions, the data are too disparate to trace growth and to compare generic and specific populations in different faunal areas.

In a lengthy paper dealing with the Rhynchota, Amyot (1845, pp. 369-492; 1846, pp. 73-192) proposed a monomial system to replace the binomial nomenclature as originally organized by Linnaeus (1758). This new system, mononymy, would classify animals by means of a one-word taxon representing both genus and species in lieu of the binary system of two words, one for genus and the other for species. This monomial system of Amyot was never seriously considered by entomologists, nor recognized in the Zoological Code.

Under Division III, Membranientes, Amyot (1846, pp. 175-192) mononymized technical names for a number of species of tingids and piesmatids. In the transition from the binomial to the monomial system, he employed several well-known generic names and created a number of new monomial names. Only one of the mononymic taxa was created for a new tingid species, the others being erected for well-known species of that time. This mononymic species, "*Dictyesthes*," described by Amyot (1846, p. 181), has been cited by Garbiglietti (1869, p. 275) as *Dictyonota dictyesthes* Amyot. The publication of Garbiglietti (1869) validated *D. dictyesthes* as a specific name and thus credit of authorship must be given to Garbiglietti rather than to Amyot.

In his "Nomenclator Zoologicus," Neave (1939-1950) wrongly included the monomial names of species named or renamed by

Amyot as generic names and credited them to Amyot as such. This is a serious error. Since Amyot's names are not true generic names and have no nomenclatorial standing, they are not included herein in the present treatise of the generic names of Tingidae of the world. The authors hope that the above comments will prevent further confusion and use of these monomial names.

In his catalog of the Hemiptera, Walker (1873, pp. 175-179) included only two families, Tingididae and Piesmididae, in the Membranacea, and divided a number of tingid genera into "Divisions" and "Subdivisions." For the new taxa below the generic level, Walker used a jumble of scientific names of other workers. These names were wrongly employed, wrongly synonymized, and wrongly classified by him. Since no new generic or subgeneric names are involved, the present authors are following previous catalogers and omitting Walker's names of generic and subgeneric divisions.

The proper form of the family name of the lace-bugs was an item of contention for more than a century. The moot point of the controversy rested almost entirely upon finding the correct "root" and "stem" of the type generic term *Tingis* of Fabricius. These items have been amiably and consummately investigated by Holland (1922a; 1922b; 1924), Baker (1922; 1923), Parshley (1922a; 1922b), and Schmitz (1935). Their findings showed much diversity of opinions and little unanimity as to the origin and status of "*Tingis*."

In January 1923, Baker submitted to the International Commission of Zoological Nomenclature a concise summary of the findings and conclusions on the controversy of Holland, Parshley, and himself, including a request for a ruling on the origin and formation of the word "*Tingis*." To quote from Opinion 143 of the International Commission of Zoological Nomenclature (1943, pp. 83-85):

Tingis étant un nom latin dont le genitif est *Tingis* et l'accusatif *Tingim*, TINGIDAE est la forme correcte du nom de la famille.

The ruling was:

The family name for *Tingis* Fabricius, 1803 (*Syst. Rhyng.*: 124) in the Hemiptera is TINGIDAE.

Beginning with volume 59 (1922), the Zoological Record has continually used the family name Tingidae for the lace-bugs. That spelling under the *Régles* has been universally accepted as the proper family name for the lace-bug family.

Stål (1873, p. 116) and Distant (1903c, pp. 122-145) both used the higher categories as divisions for the family Tingidae, although Distant placed a few genera in the wrong division. These categories were Cantacaderaria, Serenthiaria, and Tingidaria. Later, Distant

(1909, pp. 121–122) created two new divisions: *Axiokersosaria*, for the reception of *Aziokersos ovalis* Distant, from India; and *Aidoneusaria* to hold *Aidoneus dissimilis* Distant. As the characters of these two new divisions will not always separate them from genera of the division *Tingidaria*, they are both synonymized here with *Tinginae* (olim *Tingidaria*).

Since Distant's (1903c) work titled "The Fauna of British India" is used so extensively in systematic studies, the present equivalent taxa for the above divisions are listed here:

Cantacaderaria, synonymized with subfamily *Cantacaderinae*.

Serenthiaria, synonymized with subfamily *Agrammatinae*.

Tingidaria, synonymized with subfamily *Tinginae*.

Axiokersosaria, synonymized with subfamily *Tinginae*.

Aidoneusaria, synonymized with subfamily *Tinginae*.

Blatchley (1926) subdivided the subfamily *Tinginae* into three new tribes for the reception of the genera occurring in eastern North America. The status of these tribes is discussed below in the order of their erection.

Tribe *Galeatini* Blatchley (1926, p. 451) comprises the genera *Galeatus*, *Corythuca* (error for *Corythucha*), *Stephanitis*, *Leptobyrsa* (not Stål), *Corythaica*, *Dictyonota*, *Gargaphia*, *Gelchossa*, *Leptodictya*, and *Acanthocheila*. *Gelchossa* is a synonym of *Leptopharsa* (p. 58). *Leptobyrsa* is a South American genus not represented in the United States. As used by Blatchley (not Stål), *Leptobyrsa* is synonymous with *Stephanitis*, and thus *Stephanitis blatchleyi* Drake (1925b, p. 37) and *S. rhododendri* Horváth (1905, p. 567) were wrongly transferred by him from their original generic position to this genus. *Galeatini* is not applicable for the inclusion of some of the American genera as well as many related genera in the Old World, and it is here suppressed as a synonym of the subfamily *Tinginae* (p. 31).

The tribal name *Acalyptini* Blatchley (1926, p. 479) was established to hold the genera *Acalypta* and *Drakella*. As the latter is a synonym of the former, only *Acalypta* is left in the tribe. *Acalyptini* is not a valid tribe and thus is treated here as a synonym of *Tinginae* (p. 31).

The tribal name *Physatocheilini* Blatchley (1926, p. 483) was established to include the genera *Physatocheila*, *Dichocysta*, *Tingis*, *Teleonemia*, and *Leptoypha*. The characters employed by Blatchley in his tribal descriptions and key couplets do not correspond to those of the genus *Physatocheila* itself, those of all the species of *Teleonemia* of South America; nor those of some genera found in insular America, South America, and the Old World. Thus, it becomes necessary here to synonymize the tribe *Physatocheilini* with *Tinginae* (p. 31).

Fossil Forms

Fossil records are too few to tell much about tingids in geologic time. The molds of the species that became entangled and engulfed in amber, both Baltic and Prussian, belong to existing genera, though specifically representing quite different species. Most of the petrified forms also belong to existing genera. Table 1 summarizes the distribution of fossil species. There are 6 genera and 9 species, plus 4 species

TABLE 1.—Distribution of fossil genera of Tingidae

Subfamilies and genera	Nearctic species (5)		Palearctic species (9)	
	In amber	In stone	In amber	In stone
Cantacaderinae				
Cantacader			2	
Phatnoma			1	
Tinginae				
Celantia		1		
Dictyla		1		2
Eotingis		1		
Tingis		2	1	3

determined only as "*Tingis* sp." The genera not represented by present-day species are mentioned below.

Eotingis Scudder (1890, p. 359) was erected to hold *antennata* Scudder (p. 360, fig.) from the United States (Florissant, Colorado. Horizon, Oligocene) and *Tingis quinquecarinata* Germar and Berendt (1856, p. 23, figs.), found in Prussian amber. Since *T. quinquecarinata* is being transferred to the genus *Cantacader* of the subfamily Cantacaderinae, this now leaves *Eotingis* with the genotype as its only member.

***Cantacader quinquecarinatus* (Germar & Berendt), new combination**

Tingis quinquecarinata Germar and Berendt, 1856, p. 23, fig. — Scudder, 1891, p. 449.
Eotingis quinquecarinata Scudder, 1890, p. 359; 1891, p. 406.

Scudder (1890, p. 359) wrongly transferred *Tingis quinquecarinata* Germar and Berendt to the genus *Eotingis* Scudder. The original description and the two fine illustrations of *T. quinquecarinata* show that species to be a typical member of the genus *Cantacader* Amyot and Serville, and it is herein transferred.

For an unusual fossil found in southern Russia, Bekker-Migdisova (1953) created for its reception the name *Tingiopsis reticulata* in the family Tingidae. A study of the venation of the hemelytron of this fossil species shows that it does not fall into the classification of the

family Tingidae of the Hemiptera. To the present authors, the wing appears to be that of a homopteron, perhaps the family Psyllidae.

In a recent paper Evans (1957, p. 289) placed *Tingiopsis reticulata* in the family Cercopidae of the Homoptera. Until more specimens are found that will provide better structural characters on the familial level, the species should be left in family Cercopidae.

FOSSILIZED GENERA AND SPECIES

Name	Discovery
Subfamily Cantacaderinae Stål:	
<i>Cantacader avitus</i> Drake, 1950.....	Baltic amber
<i>Cantacader quinquecarinatus</i> (Germar and Berendt), 1856.....	Baltic amber
<i>Phatnoma baltica</i> Drake, 1950.....	Baltic amber
Subfamily Tinginae Stål:	
<i>Celantia seposita</i> Cockerell, 1921.....	Oligocene, Isle of Wright
<i>Dictyla veterana</i> (Seudder), 1890.....	Florissant, Colorado
<i>Dictyla flexouosa</i> (Novak), 1877.....	Bohemia (Krottensee)
<i>Dictyla wollastoni</i> (Heer), 1865.....	Baden (Oeningen)
<i>Eotingis antennata</i> Seudder, 1890.....	Florissant, Colorado
<i>Tingis florissantensis</i> Cockerell, 1914.....	Florissant, Colorado
<i>Tingis obscura</i> Heer, 1853.....	Croatia (Radoboj)
<i>Tingis</i> sp., Berendt, 1865.....	Prussian amber
<i>Tingis</i> sp., Hope, 1847.....	France (Aix)
<i>Tingis</i> sp., Seudder, 1881.....	Florissant, Colorado
<i>Tingis</i> sp., Serres, 1829.....	France (Aix)

Chorology

FAUNAL DIVISIONS

The partitioning of the world into faunal realms, regions, subregions, and provinces has been a concern of zoogeographers for more than a century. The basic concepts and features of faunal divisions were formulated by such eminent scholars as Swainson (1835), Sclater (1858; 1874), Darwin (1859), Huxley (1868), and Wallace (1876). The recent book by Darlington (1957) on zoogeography and the one by Lindroth (1957) on faunal connections between Europe and America are classics in their respective fields. All of the above publications also have been most helpful in charting the chorology of the existing tingifauna by regions.

Schmidt's (1954) schemes of faunal division and maps of the world (figs. 2, 3) based on grid North Pole with continents radiating in their relative positions have been followed rather closely. As our data failed to lend themselves fully into the lower subdivisions of provinces, the faunal tabulations of genera and of species were not carried further than the subregions. For the same reasons the Caribbean Transition subregion and the Celebesian Transition province were not included in the tables.

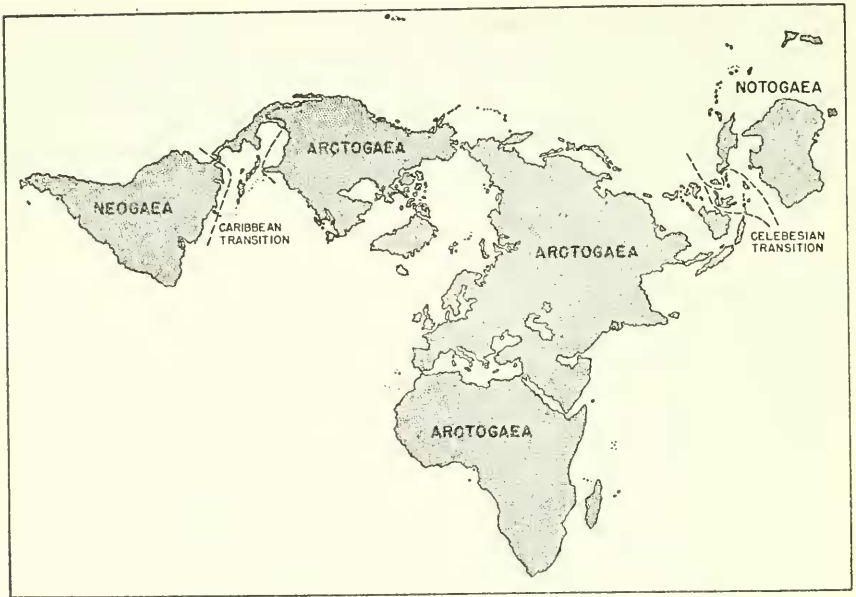


FIGURE 2.—Faunal realms of the world.

The genera and species of living tingids as they are known today are treated chorologically in table 2. There appear to be no truly relict species. Morphologically, the Cantacaderinae represent the oldest and most primitive subfamily, and two of its genera are well represented by both living and fossil forms. The genus *Dictyla* of the subfamily Tinginae contains more species and is more widely distributed than any other genus of this subfamily comprising both extinct and living species.

The literature shows that certain regions such as Europe, North America, Brazil, Belgian Congo, and Japan have received more attention taxonomically than many other areas. Tingids are poorly known from many islands of the South Pacific and Indian Oceans. Many parts of the Orient, Africa, and South America have also received scant consideration.

The circular graphs (figs. 4, 5) depict the genera and species by faunal subregions. The Ethiopian subregion is represented by 296 species divided among 65 genera, the Oriental by 256 species among 67 genera, and the Neotropical by 594 species among 60 genera. The larger genera in the Neotropical indicate that many genera of this subregion are less primitive than those found in the Ethiopian and Oriental regions.



FIGURE 3.—Faunal regions and subregions of the world.

TABLE 2.—*Distribution of Tingidae by faunal zones*

Subfamilies, genera, and No. species	Arctogaean					Neogaean	Notogaean			
	Holarctic		Paletropical			Neotropical	Australian		Oceanian	
	Nearctic	Palaearctic	Oriental	Ethiopian	Malagasy	Neotropical	Australian	Papuan	New Zealandian	Oceanic
AGRAMMATINAE										
<i>Genera (5)</i>										
Agramma (49)		17	10	22	1	1	1			
Ceratinoderma (2)				2						
Coleopterodes (2)						2				
Lullius (2)				2						
Sabestena (1)				1						
<i>Species (56)</i>		17	10	27	1	2	1			
CANTADERINAE										
<i>Genera (21)</i>										
Allocader (2)		1	8	8	2	5	5	3	1	2
Angiocader (1)				1			2			
Astolphos (1)				1						
Cantacader (27)		4	9	8	3		2	1		1
Ceratocader (2)							2			
Cnemidrus (1)				1						
Cyclotynaspis (1)			1							
Cyperobia (1)									1	
Eocader (2)						2				
Gonycentrum (9)			1	7			1			
Malala (1)			1							
Nectocader (1)						1				
Oranoma (1)								1		
Phatnoma (25)			6	2	1	11	1	1		2
Plesionoma (3)				3						
Pseudophatnoma (1)			1							
Recareus (1)			1							
Stenocader (1)						1				
Teratocader (1)			1							
Ulmus (1)				1						
Zetekella (3)						3				
<i>Species (86)</i>		4	21	24	4	18	8	3	1	3
TINGINAE										
<i>Genera (188)</i>										
Abdastartus (3)			58	53	26	54	46	5	5	14
Acalypta (37)	10	25	1			1				
Acanthocheila (15)	2					15				
Acanthotings (1)						1				
Aconchus (2)			1	2						
Acysta (9)						8	1			
Aepyceysta (3)						3				
Aframixia (1)					1					
Agachila (1)				1						
Agaotings (1)									1	
Aglotings (3)				3						
Aldoneus (1)			1							
Allolothucha (3)			3							

TABLE 2.—*Distribution of Tingidae by faunal zones—Continued*

Subfamilies, genera, and No. species	Arctogaeon					Neo- gacan	Notogaeon			
	Holarctic		Paletropical			Neo- tropical	Australian		Oceanian	
	Nearectic	Palaearctic	Oriental	Ethiopian	Malagasy	Neotropical	Australian	Papuan	New Zealandian	Oceanic
Allotings (2)						2				
Alveotings (3)	3									
Amblystira (18)						18				
Ambyeysta (4)						4				
Amnianus (29)		2	6	20	1					
Angolotings (1)				1						
Angolusa (1)				1						
Aphelotings (3)			1		2					
Aristohyrsa (1)						1				
Arushia (2)				2						
Atheas (14)	6					9				
Aulotings (1)										1
Australotings (2)							2			
Axiokersos (1)			1							
Bacochila (5)			4		1					
Baeotings (3)						3				
Baichila (3)				3						
Bako (5)			4	1						
Belenus (6)			3	3						
Berotings (3)										3
Birabena (4)						4				
Biskria (5)		5								
Bunla (1)				1						
Bunotings (1)							1			
Callithrinco (2)						2				
Caloloma (1)						1	1			
Calotings (2)	1						1			
Campylostetra (18)		15	1	2						
Campylotings (14)						14				
Cantinsona (1)					1					
Catoplatus (16)		15	2							
Celantia (2)			2							
Cochlochila (13)		4	3	8						
Codotings (1)							1			
Collinitius (1)			1							
Compsenta (18)		1	1	16			1			
Conchotings (3)					3					
Congochila (1)				1						
Copium (9)		8	1							
Corinthus (1)									1	
Corycera (17)						17				
Corythaica (13)	4					11				
Corythauma (1)			1	1						
Corythotings (1)										1
Corythucha (72)	51					27				
Cottothucha (1)			1							
Cromerus (8)			6				1	1		1
Cysteochila (83)			33	34	11		4			2
Dasytins (2)			2							

TABLE 2.—*Distribution of Tingidae by faunal zones—Continued*

Subfamilies, genera, and No. species	Arctogaean					Neogaean	Notogaean			
	Holarctic		Paletropical			Neotropical	Australian		Oceanian	
	Nearctic	Palaearctic	Oriental	Ethiopian	Madagasy	Neotropical	Australian	Papuan	New Zealandian	Oceanic
Derephysia (8)		7	1							
Dichoecysta (1)	1					1				
Diconocoris (7)			7							
Dietyla (63)	3	14	12	19		14	1			
Dietyonota (26)	1	24	2	1						
Dietyotings (2)			2							
Dicysta (12)						10	2			
Diploecysta (3)							3			
Dulinius (8)			1	6	1					
Dyspharsa (1)						1				
Elasmognathus (2)			1	1						
Elasmotropis (3)		3								
Engynoma (6)							6			
Epimixia (7)							6		1	
Esocampylia (2)							2			
Eteoneus (14)			9	4						2
Euahanes (1)				1						
Euaulana (2)							2			
Eurypharsa (5)						5				
Froggattia (3)				1			2			
Fureilliger (2)							1	1		
Gabirobius (1)				1						
Galeatus (16)	2	11	3							
Gargaphia (64)	13					53				
Gitava (8)				4	4					
Gymnotingis (1)							1			
Habrochila (11)			3	7	1					
Haedus (14)			4	9	1					
Hegesidemus (4)			3		1					
Henrikus (1)				1						
Hesperotingis (7)	7									
Holophygdon (1)										1
Hovatlas (1)					1					
Hurdchila (2)			2							
Hyalochiton (6)		6								
Hybopharsa (1)						1				
Hysipyrgias (1)							1			
Idiocysta (5)										5
Idiostyla (2)						2				
Ildefonsus (1)			1							
Inoma (2)							2			
Inonomia (1)							1			
Ichnotingis (4)							4			
Kapiriella (10)				10						
Lasiaeantha (21)		4	2	10	2		3			
Leptobyrsa (8)						8				
Leptoecysta (4)						4				

TABLE 2.—*Distribution of Tingidae by faunal zones—Continued*

Subfamilies, genera, and No. species	Arctogaean					Neogaean	Notogaean			
	Holarctic		Palearctic			Neotropical	Australian		Oceanian	
	Nearctic	Palearctic	Oriental	Ethiopian	Malagasy		Neotropical	Australian	Papuan	New Zealandian
Leptodictya (52)	5					49				
Leptopharsa (103)	5			2	1	93	2			
Leptoypha (16)	8	1	3			4	1			
Lepturga (4)			1				3			
Liotingis (4)						4				
Litadea (1)					1					
Macrocoerytha (1)			1							
Macrotingis (3)						3				
Mafa (1)				1						
Malandiola (3)							3			
Mecopharsa (1)							1			
Megalocysta (1)						1				
Melanorhopala (3)	3									
Monostelra (5)		5		1						
Mummius (2)				2						
Naochilla (6)				5	2					
Neotingis (1)						1				
Nesocypselas (6)										6
Nesocysta (1)					2					1
Nesotingis (2)										
Nethersia (7)							7			
Nobarnus (3)							1		2	
Nyctotingis (2)						2				
Oetacysta (1)		1								
Oedotingis (2)						2				
Ogygotingis (1)					1					
Olastrida (1)				1						
Oncochilla (2)		2								
Oncophysa (3)							3			
Onymochilla (1)				1						
Orotingis (1)			1							
Pachycysta (4)						4				
Palauella (1)										1
Paracopium (37)		1	5	18	8		4		1	1
Parada (6)							6			
Paseala (1)				1						
Penottus (6)			6							
Perbrinckea (1)				1						
Perissonemia (14)			9	4			1			
Phacoehilla (1)						1				
Phaenotropis (2)		2		1						
Phymacysta (7)						7				
Physatochella (39)	5	10	12	8			5			
Planibyrsa (4)						4				
Platytingis (1)				1	1					
Plerochilla (4)				4	1					
Pleseobyrsa (10)						10				

TABLE 2.—*Distribution of Tingidae by faunal zones—Continued*

Subfamilies, genera, and No. species	Arctogaean					Neogaean	Notogaean			
	Holarctic		Paletropical			Neotropical	Australian		Oceanian	
	Neartic	Palaartic	Oriental	Ethiopian	Malagasy	Neotropical	Australian	Papuan	New Zealandian	Oceanic
<i>Phobyrsa</i> (6)				4	2	6				
<i>Pogonostyla</i> (6)										
<i>Pontanus</i> (4)			1	1			2			
<i>Pseudodacysta</i> (1)	1									
<i>Psilobyrsa</i> (2)						2				
<i>Radinacantha</i> (3)					1		2			
<i>Renanda</i> (1)					1					
<i>Sanazarjusz</i> (3)				3						
<i>Sinuessa</i> (4)				4						
<i>Sphaerista</i> (1)		1								
<i>Sphaerocysta</i> (13)						13				
<i>Stenoecysta</i> (1)						1				
<i>Stephanitis</i> (59)	3	6	42	1		8	2	4		
<i>Stymmonotus</i> (1)					1					
<i>Tanybyrsa</i> (2)							2			
<i>Tanytingis</i> (2)			2							
<i>Teleonemia</i> (83)	13		1			75	1			1
<i>Tigava</i> (15)						15				
<i>Tigavaria</i> (1)							1			
<i>Tingis</i> (102)	1	51	14	4		13	13			
<i>Trachypcplus</i> (5)			4					1		
<i>Uhlerites</i> (2)			2							
<i>Ulocysta</i> (1)						1				
<i>Ulonemia</i> (9)			4				5			1
<i>Ulotingis</i> (5)						5				
<i>Urentius</i> (13)		5	6	2			1			
<i>Vatiga</i> (10)						10				
<i>Xenotingis</i> (5)			3					2		
<i>Xynotingis</i> (1)			1							
<i>Ypsotingis</i> (3)			3							
<i>Zatlingis</i> (1)						1				
<i>Zelotingis</i> (1)						1				
<i>Species</i> (1,625)	148	229	256	245	53	574	118	9	6	27
<i>Total genera</i> (214)	22	28	67	65	29	60	52	8	6	16
<i>Total species</i> (1,767)	148	250	287	296	58	594	127	12	7	50

Of all the tingids found in the Eastern Hemisphere, there is only one—*Stephanitis pyrioides*, in Argentina—that is recorded in South America. Several species occur in both the Neartic and Neotropical subregions, but there are more species shared by faunal subregions in the Old World than in the Americas.

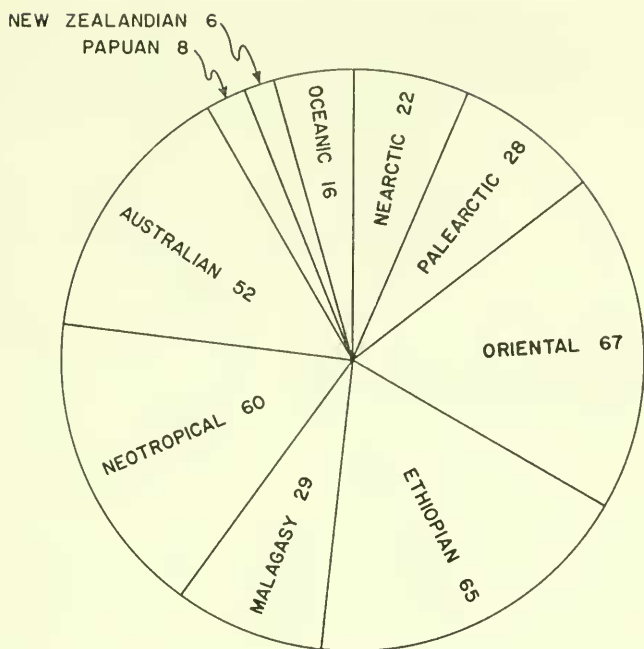


FIGURE 4.—Distribution of tingid genera by faunal subregions.

FAUNAL EXCHANGE

NATURAL: Numerous genera are shared by two or more faunal subregions (table 2). Distribution of existing species is shown in figure 5 and in table 2. The fossil species are treated in table 1.

Natural emigration of tingids is a more or less continuous phenomenon and varies greatly with the biotic potential and vagility of the species. The faunal subregions (figs. 3–5) with land-connections such as the Nearctic and Neotropical, and the Palearctic, Oriental, and Ethiopian subregions share more genera and species than subregions without such connections, such as South America and Australia, and South America and Africa. Some tingid species have disseminated over large areas, although most species are not very active or strong fliers and are rather sedentary in habit. Macroptery and brachyptery are present in a considerable number of species. The brachypterous form has metathoracic or flight wings atrophied or entirely absent. Apterous forms are unknown.

IMPORTED: Only a few species of Tingidae from the Old World have been introduced across the seas into the Americas through the agency of man, all unintentionally. However, only one transport has occurred in the opposite direction, and that purposely. The latter case concerns the purposeful introduction of *Teleonemia scrupulosa*

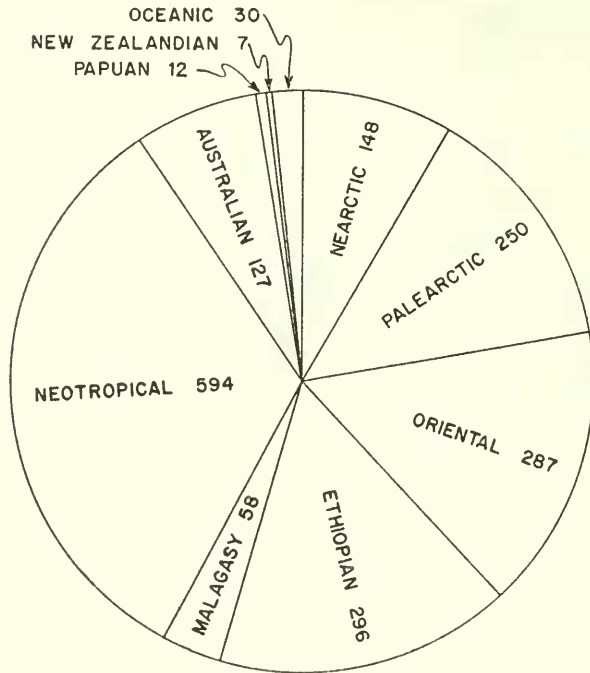


FIGURE 5.—Distribution of tingid species by faunal subregions.

Stål from the neotropics into the Hawaiian Islands for the "biological control" of the noxious lantana plant, previously imported there as a decorative flowering shrub from Mexico. Since then, this tingid has been released in numbers for the same purpose in India, Australia, Fiji, the Philippines, and islands of the South Pacific and Indian Oceans. *Teleonemia* is an indigenous American genus and records of its occurrence in Oceanic, Oriental, Australian, Papuan, Malagasy, and Ethiopian subregions are now all referable to *T. scrupulosa*. The species, formerly described from Asia and Africa as members of the genus *Teleonemia*, have all been transferred to other genera during the past two decades.

Caloloma uhleri Drake and Bruner, originally described from the West Indies, seems to be an accidentally introduced species from Australia. During the past decade, three small lots of *C. uhleri* have been identified from Queensland. As no specimen of this species has been seen from insular America since its characterization, it appears doubtful that it has been able to establish itself in the Lesser Antilles.

The genus *Dictyonota* of the Old World is represented solely in the Nearctic by the unintentionally imported species *D. tricornis* (Schrank) (described as variety *americana* Parshley) from Europe. This species

has become a permanent resident and is now found in several New England States and eastern Canada.

Corythucha morrilli Osborn and Drake, new immigrant in Hawaii, is a native of the southwestern United States, Mexico, and the West Indies.

Through international commerce (dormant nursery plants), three Palearctic species of the genus *Stephanitis* accidentally have been shipped into and became established in eastern United States: *S. globulifera* (Matsumura) and *S. pyrioides* (Scott) from Japan, and *S. rhododendri* Horváth from Europe. *Stephanitis rhododendri* was originally described by Horváth (1905, p. 567) from Holland. Distant (1910c, p. 396) theorized that the species had been introduced into Europe from India, "the headquarters of the genus *Rhododendron* in the Himalayan region." Johnson (1936, pp. 345-346) presents a different hypothesis relative to the dissemination of the rhododendron lace-bug. Contrary to other authors, he believes that *S. rhododendri* is indigenous to America (eastern United States) and that its occurrence in Europe originated from the shipments of dormant nursery plants of *Rhododendron* and *Azalea* from eastern United States.

Lounsbury (1923, p. 548) states that *S. rhododendri* gained entrance into South Africa through large shipments of rhododendron plants. In this connection, it is interesting to record that we have received several specimens of *S. pyrioides* from Australia (Lone Cove, New South Wales), taken there on azalea.

In the subfamily Agrammatinae (olim Serenithiinae) there are 56 species distributed among five genera. Fossil forms are unknown. The subfamily is represented in six of the faunal subregions of the world (table 2). It is not known to inhabit the Nearctic, Papuan, New Zealandian, and Oceanic subregions. An indigenous genus, *Coleopterodes*, with two species, is the only genus found in the Neotropical subregion, and the only one inhabiting the New World.

Agramma is by far the largest and most widely distributed genus. It comprises 17 species in the Palearctic subregion, 22 in the Ethiopian, 10 in the Oriental, 1 in the Malagasy, and 1 in the Australian. Of the 49 described species, two occupy two subregions.

The subfamily Cantacaderinae, apparently the most primitive of the Tingidae, comprises an aggregate of 86 species separated among 21 genera. Unlike the other subfamilies, there are no discordant genera in the cantacaderines. In fact, considering all genera and their components together, the entire subfamily forms a readily recognizable, homogeneous unit with combinations of characters that distinctly set them apart from both Tinginae and Agrammatinae.

Cantacaderines are represented in the Neotropical, Oriental, Malagasy, Oceanic, Papuan, Ethiopian, New Zealandian, and Australian

subregions (table 2). *Phatnoma* is by far the most widespread of all of the genera, and the only genus so far shared by both the Old and New Worlds. *Cantacader*, with 27 components, is the largest genus, and it is best represented in the Ethiopian and Oriental subregions. Of all the cantacaderines, only one species of *Cantacader* and one of *Phatnoma* are shared by two faunal subregions. The members of the remaining 19 genera are much more localized, only *Gonycentrum* (in three subregions) being known to occur in more than one subregion.

Paradoxically, an anomalous element enters into the distribution of the cantacaderines in the Holarctic region. There is a complete absence of species, both living and extinct, in the entire Nearctic subregion. In the Palearctic subregion, fossils of two genera (three species) have been found entombed in Baltic and Prussian ambers, and, singularly, only one living species is now known to exist in southern Europe.

The subfamily Tinginae constitutes by far the largest (in both number of genera and of species) and the most generally distributed subfamily of the lace-bugs. It is represented in all the world's faunal subregions except the Arctic and Antarctic. Some of the muscicoline species, such as members of the genus *Acalypta*, have been collected far north in Eurasia and North America. The northernmost species so far found in the Americas is the muscivorous *Acalypta nyctalis* Drake, which has been found breeding in mosses in Alaska (Fairbanks and Fort Richardson) and northern Canada (near Alaska and in Newfoundland). *Acalypta* tends to be northern in distribution and is not represented south of Mexico. Its members fall among the older forms of the subfamily.

This subfamily is represented by 1,625 existing species divided among 188 genera (table 2). Both genera and species are most abundant in tropical and subtropical regions, although the temperate zones are also well represented. Approximately one-third of all the members of the subfamily are recorded from the Neotropical subregion (table 2). The average number of species in a genus is greater in this faunal area than in any of the other subregions.

There are 125 genera in one faunal subregion; 36 in two subregions; 10 in three subregions; 6 in four subregions; 6 in five subregions; 2 (*Dictyla* and *Tingis*) in six subregions; and 2 (*Paracopium* and *Stephanitis*) in seven subregions.

Only a few species of the subfamily Tinginae have been found fossilized. The fossil genera *Celantia*, *Dictyla*, and *Tingis* are represented by existing species.

Systematic Treatment

Subfamily AGRAMMATINAE Douglas and Scott

AGRAMMIDAE Douglas and Scott, 1865, p. 24 (as "family").

SERENTHIARIA Stål, 1873, pp. 116, 117; 1874, p. 46.—Puton, 1879, p. 89.—

Distant, 1903c, p. 126.—Horváth, 1906c, p. 107.—Oshanin, 1908, p. 457; 1912, p. 46. (As "division.")

AGRAMMINAE Drake and Maa, 1955, p. 10.—China and Miller, 1955, p. 261.

Type genus: *Agramma* Stephens (1829a).

Remarks: Because the name of the type genus, *Agramma*, is neuter (from the Greek, stem "Agrammatos"), the correct spelling of the subfamily name is "Agrammatinae," not "Agramminae."

Van Duzec (1917, p. 223) wrongly included a genus and species of pismatid as a Nearctic representative of this subfamily.

GENERA OF SUBFAMILY AGRAMMATINAE

Agramma Stephens (1829a, p. 64; 1829b, p. 336).

Type species: *Tingis laeta* Fallén (1807, p. 40). See plate 1, herein.

Fixation: Stephens (1829a, p. 64), by monotypy.

Later citations: China (1943, p. 248); Monte (1947, p. 4); Drake (1955c, p. 1).

Synonyms: *Drakea*, *Serenthia*, *Wombalia*, *Serenthiella*, *Paraserenthia*.

Note: China (1943, p. 248) resurrected *Agramma* Stephens—until then wrongly accredited in the literature to Westwood (1840, p. 120)—as a valid genus based upon a well-known included species (*Tingis laeta* Fallén, 1807). *Agramma* is not a nomen nudum, as theretofore cited, and has priority by 12 years over *Serenthia*. The type species of the latter is congeneric with *laeta* Fallén. Wagner (1941, pp. 1–27, figs.) divided the genus *Serenthia* Spinola into four subgenera: *Agramma* Westwood, *Serenthia* Spinola, *Serenthiella*, and *Paraserenthia*. Drake (1956d, p. 7) pointed out that Wagner's new subgenera (*Serenthiella* and *Paraserenthia*) were not applicable for the inclusion of many of the Old World species and relegated all into synonymy as inseparable from typical *Serenthia*. *Wombalia* Schouteden was suppressed by Drake (1954a, p. 13) as a synonym of *Serenthia*.

Distribution of species: Ethiopian (22), Palearctic (17), Oriental (10), Australian (1), Malagasy (1).

Number of species: 49.

Ceratinoderma Stål (1873, p. 117).

Type species: *Ceratinoderma fornicata* Stål (1873, p. 117).

Fixation: Stål (1873, p. 117), by monotypy.

Later citation: Monte (1947, p. 4).

Note: Type species figured by Distant (1902a, p. 240, pl. 15, fig. 4).

Distribution of species: Ethiopian.

Number of species: 2.

Coleopterodes Philippi (1864, p. 306).

Type species: *Coleopterodes fuscescens* Philippi (1864, p. 306) = *Solenostoma liliputiana* Signoret (1863, p. 575).

Fixation: Philippi (1864, p. 306), by monotypy (as *Coleopterodes fuscescens* Philippi (1864, p. 306) = *Solenostoma liliputiana* Signoret (1863, p. 575)).

Later citations: Drake (1922a, p. 353; 1922b, p. 50); Drake and Poor (1936a, p. 383); Monte (1947, p. 5).

Homonym: *Solenostoma*.

Note: As both generic and specific names of *Coleopterodes fuscescens* Philippi (1864) and of *Solenostoma liliputiana* Signoret (1863) were created to hold identical species, they are consequently synonyms. The preoccupation of *Solenostoma* (1863) (homonym) by a genus of fishes gives antecedence to *Coleopterodes* Philippi (junior synonym) as the valid generic name and *liliputiana* (Signoret) survives as the valid specific name by priority. See Kirkaldy (1900, p. 241) and Drake (1922a, p. 353, fig.).

Distribution of species: Neotropical.

Number of species: 2.

Drakea Schouteden (1953, p. 166). Synonym of *Agramma*.

Type species: *Drakea lcleupi* Schouteden, 1953, p. 166.

Fixation: Schouteden (1953, p. 166), by monotypy.

Synonymy: See *Agramma*. Synonymized by Drake (1958a, p. 107).

Lullius Distant (1904, p. 429).

Type species: *Lullius major* Distant (1904, p. 430, fig.).

Fixation: Distant (1904, p. 430), by monotypy.

Later citation: Monte (1947, p. 5).

Note: This genus originally included two species but as the generic name of *Lullius minor* Distant was followed by a question mark, *Lullius* is effectively monobasic. [*L. minor* is here transferred to the genus *Agramma* (new combination).]

Distribution of species. Ethiopian.

Number of species: 2.

Paraserenthia Wagner (1941, pp. 6, 8, 26, as subgenus of *Serenthia*).

Synonym of *Agramma*.

Type species: *Tingis ruficornis* Germar (1835, fasc. 15, fig.).

Fixation: Wagner (1941, pp. 8, 26), by original designation.

Synonymy: See *Agramma*. Synonymized by Drake (1956d, p. 7).

Sabestena Drake (1944b, p. 67).

Type species: *Sabestena africana* Drake (1944b, p. 67, fig.).

Fixation: Drake (1944b, p. 67), by monotypy and original designation.

Later citations: Monte (1947, p. 5).

Distribution of species: Ethiopian.

Number of species: 1.

Serenthia Spinola (1837, p. 168). Synonym of *Agramma*.

Type species: *Serenthia atricapilla* Spinola (1837, p. 168).

Fixation: Spinola (1837, p. 168), by monotypy.

Later citations: Distant (1911b, p. 269); Monte (1947, p. 5).

Synonymy: See *Agramma*. Synonymized by China (1943, p. 328); see Drake (1956d, p. 7).

Serenthiella Wagner (1941, pp. 6, 8, 26, as subgenus of *Serenthia*).

Synonym of *Agramma*.

Type species: *Serenthia minuta* Horváth (1874, p. 333).

Fixation: Wagner (1941, p. 26), by monotypy and original designation.

Synonymy: See *Agramma*. Synonymized by Drake (1956d, p. 7).

Solenostoma Signoret (1863, p. 575). Preoccupied; see *Coleopterodes*.

Type species: *Solenostoma liliputiana* Signoret (1863, p. 575, fig.)

Fixation: Signoret (1863, p. 575), by monotypy.

Later citations: Drake (1922a, p. 353); Drake and Poor (1936a, p. 383); Monte (1947, p. 5).

Synonymy: See *Coleopterodes*. Synonymized by Kirkaldy (1900, p. 241).

Note: *Solenostoma* preoccupied. The transfer of *S. liliputiana* Signoret to the genus *Coleopterodes* made it the genotype of *Coleopterodes* by priority. See Drake (1922b, p. 50).

Wombalia Schouteden (1919, p. 139). Synonym of *Agramma*.

Type species: *Wombalia vanderstyti* Schouteden (1919, p. 139).

Fixation: Schouteden (1919, p. 139), by monotypy and original designation.

Later citation: Monte (1947, p. 22).

Synonymy: See *Agramma*. Synonymized by Drake (1954a, p. 13).

Note: Monte (1947, p. 22) wrongly included *Wombalia* in the subfamily Tinginae.

Subfamily CANTACADERINAE Stål

CANTACADERARIA Stål, 1873, p. 116; 1874, p. 46; Puton, 1879, p. 88; Distant, 1903e, p. 122; Horváth, 1906c, p. 10; Oshanin, 1908, p. 400; 1912, p. 42. (As "division.")

CANTACADERINI Champion, 1897, p. 2. (As "group.")

TYPE GENUS: *Cantacader* Amyot and Serville.

GENERA OF SUBFAMILY CANTACADERINAE

***Allocader* Drake** (1950, p. 156).

Type species: *Cantacader leai* Hacker (1928, p. 176, fig.)

Fixation: Drake (1950, p. 156), by original designation.

Distribution of species: Australian.

Number of species: 2.

***Angiocader* Drake**, 1950, p. 159.

Type species: *Phatnoma obesus* Distant (1902a, p. 239, fig.)

Fixation: Drake (1950, p. 159), by monotypy and original designation.

Distribution of species: Ethiopian.

Number of species: 1.

***Astolphos* Distant** (1904, p. 428).

Type species: *Astolphos capitatus* Distant (1904, p. 429, fig.).

Fixation: Distant (1904, p. 428), by monotypy.

Later citations: Monte (1947, p. 3); Drake (1950, p. 163).

Distribution of species: Ethiopian.

Number of species: 1.

***Cantacader* Amyot and Serville** (1843, p. 299).

Type species: *Piesma quadricornis* Le Peletier and Serville (1828, p. 653). See plate 2, herein.

Fixation: Amyot and Serville (1843, p. 299), by monotypy.

Later citations: Oshanin (1912, p. 42); Monte (1947, p. 3); Drake (1950, p. 163).

Synonym: *Taphrostethus*.

Variant spelling: *Canthacader*. (Amyot and Serville, 1843, p. 652 (index); Schouteden, 1916, p. 290; 1923, p. 83; 1955, pp. 162, 163.)

Distribution of species: Oriental (9), Ethiopian (8), Malagasy (3), Palearctic (4), Australian (2), Papuan (1), Oceanic (1), Fossil (2, Baltic and Prussian ambers).

Number of species: 27.

Canthacader. Error for *Cantacader*.

Ceratocader Drake (1950, p. 157).

Type species: *Cantacader armatus* Hacker (1928, p. 174, fig.).

Fixation: Drake (1950, p. 158), by monotypy and original designation.

Distribution of species: Australian.

Number of species: 2.

Cnemiandrus Distant (1902a, p. 239).

Type species: *Cnemiandrus typicus* Distant (1902a, p. 240, fig.).

Fixation: Distant (1902a, p. 240), by monotypy.

Later citations: Monte (1947, p. 3); Drake (1950, p. 164).

Distribution of species: Ethiopian.

Number of species: 1.

Cyclotynaspis Montandon (1892, p. 265).

Type species: *Cyclotynaspis acalyptooides* Montandon (1892, p. 265).

Fixation: Montandon (1892, p. 256), by monotypy.

Later citation: Monte (1947, p. 3).

Note: Drake (1955e, p. 78, fig.) redescribed and figured type species.

Distribution of species: Oriental.

Number of species: 1.

Cyperobia Bergroth (1927, p. 673).

Type species: *Cyperobia carectorum* Bergroth (1927, p. 674).

Fixation: Bergroth (1927, p. 674), by monotypy.

Later citations: Monte (1927, p. 3); Drake (1950, p. 164).

Distribution of species: New Zealandian.

Number of species: 1.

Eocader Drake and Hambleton (1934, p. 436).

Type species: *Eocader vegrandis* Drake and Hambleton (1934, p. 436, fig.).

Fixation: Drake and Hambleton (1934, p. 436), by monotypy and original designation.

Later citations: Drake and Poor (1936a, p. 382); Monte (1939, p. 63; 1941, p. 71; 1947, p. 3); Drake and Hambleton (1944, p. 121); Drake (1944a, p. 141; 1950, p. 164); Hurd (1946, p. 439).

Synonym: *Montea*.

Distribution of species: Neotropical.

Number of species: 2.

Gonycentrum Bergroth (1898, p. 9).

Type species: *Teleia coronata* Fieber (1844, p. 56, fig.).

Fixation: Fieber (1844, p. 56), by monotypy.

Later citations: Monte (1947, p. 3); Drake (1950, p. 165).

Synonyms: *Teleia*, *Sinalda*.

Note: Bergroth (1898, p. 9) proposed *Gonycentrum* as a new generic name to replace *Teleia* (preoccupied), and thus *Teleia coronata* became the type species of *Gonycentrum* by autotypy.

Distribution of species: Ethiopian (7), Oriental (1), Australian (1).

Number of species: 9.

Malala Distant (1910a, p. 101).

Type species: *Malala bulliens* Distant (1910a, p. 101, fig.).

Fixation: Distant (1910a, p. 101), by monotypy.

Later citations: Monte (1947, p. 3); Drake (1950, p. 165).

Distribution of species: Oriental.

Number of species: 1.

Minitingis Barber (1954, p. 7). Synonym of *Zetekella*. (New synonymy.)

Type species: *Minitingis minusculus* Barber (1954, p. 7, fig.).

Fixation: Barber (1954, p. 7), by monotypy.

Synonymy: See *Zetekella*.

Note: An examination of the type species of *Minitingis* and of *Zetekella* Drake (1944) shows that they are congeneric. *Minitingis* is thus a junior synonym of *Zetekella*, to which *M. minusculus* Barber is here transferred. (New combination.)

Montea Bruner (1940, p. 246). Synonym of *Eocader*.

Type species: *Montea bouclei* Bruner (1940, p. 246, fig.).

Fixation: Bruner (1940, p. 246), by monotypy and original designation.

Later citation: Monte (1947, p. 3).

Synonymy: See *Eocader*. Synonymized by Monte (1942, p. 104); Drake and Hambleton (1944, p. 121).

Nectocader Drake (1928a, p. 41).

Type species: *Cantacader gounellei* Drake (1923b, p. 81, fig.).

Fixation: Drake (1928a, p. 41), by original designation.

Later citations: Drake and Poor (1936a, p. 283); Monte (1939, p. 63; 1941, p. 71; 1947, p. 3); Drake (1944a, p. 141; 1950, p. 165).

Distribution of species: Neotropical.

Number of species: 1.

Oranoma Drake (1951, p. 165).

Type species: *Oranoma biroi* Drake (1951, p. 165).

Fixation: Drake (1951, p. 166), by monotypy and original designation.

Distribution of species: Papuan.

Number of species: 1.

Phatnoma Fieber (1844, p. 57).

Type species: *Phatnoma laciniata* Fieber (1844, p. 57, fig.).

Fixation: Fieber (1844, p. 57), by monotypy.

Later citations: Drake and Poor (1936a, p. 383), Monte (1941, p. 72; 1946, p. 253; 1947, p. 4), Drake (1944a, p. 141; 1950, p. 165); Hurd (1946, p. 438).

Distribution of species: Neotropical (11), Oriental (6), Ethiopian (2), Oceanic (2), Australian (1), Papuan (1), Fossil (1, Baltic amber), Malagasy (1).

Number of species: 25.

Plesionoma Drake (1950, p. 157).

Type species: *Phatnoma humeralis* Distant (1902a, p. 239, fig.).

Fixation: Drake (1950, p. 157), by monotypy and original designation.

Distribution of species: Ethiopian.

Number of species: 3.

Pseudophatnoma Blöte (1945, p. 78).

Type species: *Pseudophatnoma corniculata* Blöte (1945, p. 78, fig.).

Fixation: Blöte (1945, p. 78), by monotypy and original designation.

Later citation: Drake (1950, p. 166).

Distribution of species: Oriental.

Number of species: 1.

Recaredus Distant (1909b, p. 361).

Type species: *Recaredus rex* Distant (1909b, p. 361).

Fixation: Distant (1909b, p. 361), by monotypy.

Later citations: Distant (1910a, p. 104, fig., redescription and figure of type species); Monte (1947, p. 19); Drake (1950, p. 166).

Note: Monte (1947, p. 19) wrongly placed *Recaredus* in subfamily *Tinginae*.

Distribution of species: Oriental.

Number of species: 1.

Sinalda Distant (1904, p. 426). Synonym of *Gonycentrum*.

Type species: *Sinalda elegans* Distant (1904, p. 427, fig.).

Fixation: Monte (1947, p. 4), by subsequent designation.

Synonymy: See *Gonycentrum*. Synonymized by Drake (1950, p. 165).

***Stenocader* Drake and Hambleton** (1944, p. 120).

Type species: *Piesma tingidooides* Spinola (1852, p. 200).

Fixation: Drake and Hambleton (1944, p. 120), by monotypy and original designation.

Later citations: Drake (1944a, p. 142; 1950, p. 166); Monte (1947, p. 4).

Distribution of species: Neotropical.

Number of species: 1.

Taphrostethus Fieber (1844, p. 40). Synonym of *Cantacader*.

Type species: *Taphrostethus quinquecostatus* Fieber (1844, p. 41, fig.).

Fixation: Fieber (1844, p. 41), by monotypy.

Later citation: Monte (1947, p. 4).

Synonymy: See *Cantacader*. Synonymized by Stål (1873, p. 116).

Teleia Fieber (1844, p. 55). Preoccupied, see *Gonycentrum*.

Type species: *Teleia coronata* Fieber (1844, p. 56, fig.).

Fixation: Fieber (1844, p. 56), by monotypy.

Later citation: Monte (1947, p. 4).

Synonymy: See *Gonycentrum*.

Note: As *Teleia* Fieber (1844) was preoccupied in Lepidoptera, Bergroth (1898, p. 9) proposed *Gonycentrum* as its replacement.

***Teratocader* Drake** (1950, p. 158).

Type species: *Cantacader magnificus* Drake (1923b, p. 83).

Fixation: Drake (1950, p. 158), by monotypy and original designation.

Distribution of species: Oriental.

Number of species: 1.

***Ulmus* Distant** (1904, p. 425).

Type species: *Ulmus testudineatus* Distant (1904, p. 425, fig.).

Fixation: Distant (1904, p. 426), by monotypy.

Later citations: Monte (1947, p. 4); Drake (1950, p. 166).

Distribution of species: Ethiopian.

Number of species: 1.

Zetekella Drake (1944a; p. 139).

Type species: *Zetekella zeteki* Drake (1944a; p. 140, fig.).

Fixation: Drake (1944a, p. 139), by monotypy and original designation.

Later citations: Hurd (1946, p. 439); Monte (1947, p. 4); Drake (1950, p. 166).

Synonym: *Minitingis*. (New synonymy.)

Distribution of species: Neotropical.

Number of species: 3.

Subfamily TINGINAE Laporte

TINGIDITES Laporte, 1833, p. 47.

TINGITARIA Stål, 1873, p. 118; 1874, p. 47; Puton, 1879, p. 91; Distant, 1903e, p.

130; Horváth, 1906c, p. 13; Oshanin, 1908, p. 401; 1912, p. 42 (as "division").

TINGITINA Uhler, 1886, p. 22; Banks, 1910, p. 55 (as "subfamily").

TINGIDINI Van Duzee, 1916, p. 25 (as "tribe").

ADONEUSARIA Distant, 1909, p. 125 (as "division"). (New synonymy.)

AXIOKERSOSARIA Distant, 1909, p. 124 (as "division"). (New synonymy.)

ACALYPTINI Blatchley, 1926, p. 479 (as "tribe"). (New synonymy.)

GALEATINI Blatchley, 1926, p. 451 (as "tribe"). (New synonymy.)

MONANTHINI Costa, 1855, p. 293 (as "subfamily" [?]). (New synonymy.)

PHYSATOCHILINI Blatchley, 1926, p. 483 (as "tribe"). (New synonymy.)

Type genus: *Tingis* Fabricius.

GENERA AND SUBGENERA OF SUBFAMILY TINGINAE

Abdastartus Distant (1910a, p. 103).

Type species: *Abdastartus tyrianus* Distant (1910a, p. 103)=
Monanthia atra Motschulsky (1863, p. 91).

Fixation: Distant (1910a, p. 103), by monotypy and original designation (as *Abdastartus tyrianus* Distant (1910a, p. 103)=*Monanthia atrus* Motschulsky (1863, p. 91)).

Later citation: Monte (1947, p. 5) (as *A. tyrianus* Distant).

Note: *Abdastartus tyrianus* Distant was synonymized with *Teleonemia atra* (Motschulsky) (as *Monanthia*) based upon study of type species. (See Drake, 1956e, p. 110.)

Distribution of species: Oriental.

Number of species: 3.

Acalypta Westwood (1840, p. 121).

Type species: *Tingis carinata* Panzer (1806, Heft 99, Tab. 20).

Fixation: Westwood (1840, p. 121, fig.), by monotypy.

Later citations: Oshanin (1912, p. 43); Van Duzee (1916, p. 25; 1917, p. 211); Drake (1928d, p. 2); Drake and Poor (1936a, p. 383); Monte (1941, p. 151; 1947, p. 5); China (1943, p. 245); Hurd (1946, p. 462).

Synonyms: *Drakella*, *Fenestrella*, *Orthosteira*, *Orthostira*.

Distribution of species: Palearctic (25), Nearctic (10), Oriental (1), Neotropical (1).

Number of species: 37.

***Acanthocheila* Stål (1858, p. 61).**

Type species: *Monanthia (Acanthocheila) amigera* Stål (1858, p. 61).

Fixation: Van Duzee (1916, p. 26), by subsequent designation.

Later citations: Van Duzee (1917, p. 219); Drake and Poor (1936a, p. 384); Monte (1939, p. 64; 1941, p. 73; 1947, p. 5); Hurd (1946, p. 469).

Variant spelling: *Acanthochila* Stål (1873, p. 127).

Note: Founded as a subgenus of *Monanthia*, raised to generic level by Stål (1873, p. 127).

Distribution of species: Neotropical (15), Nearctic (2).

Number of species: 15.

Acanthochila. Variant spelling for *Acanthocheila*.

***Acanthotingis* Monte (1940a, p. 13).**

Type species: *Acanthotingis apicicornis* Monte (1940a, p. 15, fig.).

Fixation: Monte (1940a, p. 14), by monotypy and original designation.

Later citation: Monte (1947, p. 6).

Distribution of species: Neotropical.

Number of species: 1.

***Aconchus* Horváth (1905, p. 566).**

Type species: *Galeatus (Aconchus) urbanus* Horváth (1905, p. 565).

Fixation: Horváth (1905, p. 565), by monotypy.

Later citations: Oshanin (1912, p. 43); Monte (1947, p. 6).

Note: Founded as a subgenus of *Galeatus*, raised to generic level by Horváth (1906c, p. 54).

Distribution of species: Ethiopian (2), Oriental (1).

Number of species: 2.

***Acysta* Champion (1898a, p. 46).**

Type species: *Acysta integra* Champion (1898a, p. 46, fig.).

Fixation: Van Duzee (1916, p. 26), by subsequent designation.

Later citations: Van Duzee (1917, p. 223); Drake and Poor (1936a, p. 384); Monte (1939, p. 64; 1941, p. 76; 1947, p. 6); Hurd (1946, p. 458).

Distribution of species: Neotropical (8), Australian (1).

Number of species: 9.

***Aepycysta* Drake and Bondar (1932, p. 93).**

Type species: *Aepycysta undosa* Drake and Bondar (1932, p. 94, fig.).

Fixation: Drake and Bondar (1932, p. 94), by monotypy and original designation.

Later citations: Drake and Poor (1936a, p. 384); Monte (1939, p. 65; 1941, p. 77; 1947, p. 6); Hurd (1946, p. 478).

Distribution of species: Neotropical.

Number of species: 3.

***Aframixia*, new genus**

Type species: *Epimixia roboris* Drake (1942b, p. 12).

Fixation: Present designation.

Note: This genus is erected here to hold *Epimixia roboris* from Madagascar.

Description: Moderately large, oblong. Head short, very little extended in front of eyes, inserted into prothorax up to hind margins of eyes, armed with not more than five spines, antenniferous tubercles short, blunt, rounded in front; bucculae rather short, areolate, with ends meeting in front. Labium rather short, stout, reaching very little beyond prosternum; laminae not very high, uniseriate, widely separated on both mesosternum and metasternum, open behind. Scent gland ostiole and channel plainly visible, with sulcus extending nearly upright. Hypocostal laminae long, uniseriate. Legs rather short, with femora slightly incrassate, tarsi considerably swollen.

Pronotum with lateral sides slowly converging anteriorly in front of humeri, very little swollen across humeral angles, coarsely reticulately punctate, unicarinate, lateral carinae completely wanting; collar distinct, with two encircling rows of small pits; paranota very narrow, cariniform, without areolae, slightly wider opposite calli and there with indistinct cells; posterior process triangular, areolate.

Elytra a little longer and slightly wider than abdomen, also slightly wider than pronotum at humeri (scarcely more than width of costal areas), divided into the usual areas; costal area horizontal, uniseriate; subcostal area wider, subvertical; discoidal area large, extending slightly beyond middle of elytra; sutural area on same level as discoidal, both areas flat and on same horizontal level.

Distinguishing characteristics: Allied to the genus *Epimixia* Kirkaldy of the Australian subregion, but easily distinguishable by the somewhat more depressed and unicarinate pronotum, depressed and almost flat underside of the abdomen, swollen tarsi, and the

less foliaceous and much more widely separated rostral laminae on mesosternum. The laminae on metasternum are also widely separated from each other and open behind.

Distribution of species: Malagasy.

Number of species: 1.

***Agachila* Drake and Gomez-Menor (1954, p. 89).**

Type species: *Agachila biafrana* Drake and Gomez-Menor (1954, p. 90, fig.).

Fixation: Drake and Gomez-Menor (1954, p. 90), by monotypy and original designation.

Distribution of species: Ethiopian.

Number of species: 1.

***Agaotingis* Drake (1954a, p. 13).**

Type species: *Tingis australis* Montrouzier (1864, p. 235).

Fixation: Drake (1954a, p. 13), by monotypy and original designation.

Distribution of species: New Zealandian.

Number of species: 1.

***Aglotingis* Drake (1954c, p. 232).**

Type species: *Aglotingis nimbana* Drake (1954c, p. 233).

Fixation: Drake (1954c, p. 233), by monotypy and original designation.

Distribution of species: Ethiopian.

Number of species: 3.

***Aidoneus* Distant (1909a, p. 122).**

Type species: *Aidoneus dissimilis* Distant (1909a, p. 123).

Fixation: Distant (1909a, p. 123), by monotypy.

Later citations: Distant (1910a, p. 126, fig., type species); Monte (1947, p. 3).

Note: Distant (1909a, p. 122) erected Division *Aidoneusaria* for the reception of this genus. Monte (1947, p. 3) wrongly placed *Aidoneus* in the subfamily Cantacaderinae.

Distribution of species: Oriental.

Number of species: 1.

***Alcletha* Kirkaldy (1900, p. 241). See *Dictyonota* (*Alcletha*).**

***Alloiothucha* Drake (1927a, p. 58).**

Type species: *Alloiothucha philippinensis* Drake (1927a, p. 58).

Fixation: Drake (1927a, p. 58), by original designation.

Later citations: Drake and Poor (1939b, p. 207, fig., type species); Monte (1947, p. 6).

Note: Drake and Poor (1937b, p. 18) erroneously suppressed *Alloiothucha* as a synonym of *Holophygdon*. Two years later they (1939b, p. 207) resurrected *Alloiothucha* as a valid genus.

Distribution of species: Oriental.

Number of species: 3.

***Allotings* Drake (1930, p. 269).**

Type species: *Leptobyrsa binotata* Drake and Bruner (1924b, p. 155).

Fixation: Drake (1930, p. 270), by monotypy and original designation.

Later citations: Drake and Poor (1936a, p. 384); Monte (1941, p. 151; 1947, p. 6).

Distribution of species: Neotropical.

Number of species: 2.

***Alveotings* Osborn and Drake (1916, p. 245).**

Type species: *Alveotings grossocerata* Osborn and Drake (1916, p. 245, fig.).

Fixation: Osborn and Drake (1916, p. 245), by monotypy and original designation.

Later citations: Van Duzee (1917, p. 221); Drake and Poor (1936a, p. 384); Monte (1941, p. 152; 1947, p. 4); Hurd (1946, p. 446).

Note: Monte (1947, p. 4) wrongly transferred *Alveotings* to subfamily Agrammatinae.

Distribution of species: Nearctic.

Number of species: 3.

***Amaurosterphus* Stål (1868, p. 92). Synonym of *Teleonemia*.**

Type species: *Tropidocheila morio* Stål (1855b, p. 187).

Fixation: Van Duzee (1917, p. 221), by subsequent designation.

Later citation: Monte (1947, p. 6).

Synonymy: See *Teleonemia*. Synonymized by Champion (1897, p. 34).

Note: *Amaurosterphus* was erected as a subgenus for the inclusion of six species of tingids. Although erected in a note under genus *Tingis*, its generic relationship was not indicated. Stål (1873, p. 131) included *Amaurosterphus* as a subgenus of *Teleonemia*.

***Amblystira* Stål (1873, pp. 120, 129).**

Type species: *Monanthia pallipes* Stål (1858, p. 62).

Fixation: Stål (1873, p. 129), by monotypy.

Later citations: Drake and Poor (1936a, p. 384); Monte (1939, p. 65; 1941, p. 77; 1947, p. 6); Hurd (1946, p. 455).

Distribution of species: Neotropical.

Number of species: 18.

***Ambycysta* Drake and Hurd (1945, p. 129).**

Type species: *Megalocysta championi* Drake (1922b, p. 38).

Fixation: Drake and Hurd (1945, p. 130), by original designation.

Later citation: Monte (1947, p. 6); Hurd (1946, p. 475).

Distribution of species: Neotropical.

Number of species: 4.

***Americia* Stål (1873, p. 131). Synonym of *Teleonemia*.**

Type species: *Tingis (America) albilatera* Stål (1873, p. 131).

Fixation: Van Duzee (1917, p. 221), by subsequent designation.

Later citation: Monte (1947, p. 6).

Synonymy: See *Teleonemia*.

Note: Established as a subgenus of *Tingis*; synonymized with genus *Teleonemia* by Champion (1898a, p. 34). Lethierry and Severin (1896, p. 18) wrongly treated *Americia* Stål as a synonym of the genus *Lasiacantha* Stål.

***Ammianus* Distant (1903c, p. 136).**

Type species: *Monanthia erosa* Fieber (1844, p. 71, fig.).

Fixation: Distant (1903c, p. 136, fig.), by monotypy and original designation.

Later citations: Distant (1910a, p. 115); Van Duzee (1916, p. 26); Monte (1947, p. 6); Drake (1955c, p. 5).

Synonyms: *Kitoko*, *Phyllontocheila* (in part), *Phyllontochila*, *Sakuntala*.

Note: Van Duzee (1916, p. 26) wrongly treated *Ammianus* Distant as a synonym of genus *Physatocheila*. For a discussion of nomenclatorial changes and history of the genera *Ammianus*, *Belenus*, *Sakuntala*, and *Physatocheila* see Drake (1955c, p. 5; 1957b, pp. 31-32). This genus and its components are much confused in the literature and the species have been described largely as members of genus *Phyllontocheila* (or *Phyllontochila*).

Distribution of species: Ethiopian (20), Oriental (6), Palearctic (2), Malagasy (1).

Number of species: 29.

Angolotingis Drake (1955a, p. 88).

Type species: *Angolotingis vilhenai* Drake (1955a, p. 88, fig.).

Fixation: Drake (1955a, p. 88), by monotypy and original designation.

Distribution of species: Ethiopian.

Number of species: 1.

Angolusa Drake (1958, p. 104).

Type species: *Angolusa machadoi* Drake (1958, p. 104).

Fixation: Drake (1958, p. 104), by monotypy and original designation.

Distribution of species: Ethiopian.

Number of species: 1.

[*Anomaloptera* Perris (1843, p. 302), in Amyot and Serville. Family *Lygaeidae*.

Note: Monte (1947, p. 22) wrongly appended *Anomaloptera* under the caption "Posicao duvidosa" at the end of his paper on genera and genotypes of Tingidae. This genus is not a tingid and belongs to the family Lygaeidae. Monte also cited incorrectly the year, page, and publication.]

Aphelotingis Drake (1948b, p. 176).

Type species: *Abdastartus muiri* Drake (1927b, p. 307).

Fixation: Drake (1948b, p. 176), by monotypy and original designation.

Distribution of species: Malagasy (2), Oriental (1).

Number of species: 3.

Aristobyrsa Drake and Poor (1937a, p. 164).

Type species: *Leptobyrsa latipennis* Champion (1897, p. 25).

Fixation: Drake and Poor (1937a, p. 164), by monotypy and original designation.

Later citations: Monte (1941, p. 79; 1947, p. 7); Hurd (1946, p. 472).

Distribution of species: Neotropical.

Number of species: 1.

Arushia Drake (1951, p. 170).

Type species: *Arushia horvathi* Drake (1951, p. 170).

Fixation: Drake (1951, p. 170), by original designation.

Distribution of species: Ethiopian.

Number of species: 2.

***Atheas* Champion** (1898a, p. 44).

Type species: *Atheas nigricornis* Champion (1898a, p. 45, fig.).

Fixation: Van Duzee (1916, p. 26), by subsequent designation.

Later citations: Van Duzee (1917, p. 222); Drake and Poor (1936a, p. 384); Monte (1939, p. 65; 1941, p. 80; 1947, p. 7); Hurd (1946, p. 460).

Distribution of species: Neotropical (9), Nearctic (6).

Number of species: 14.

***Aulotingis* Drake and Poor** (1943, p. 194).

Type species: *Aulotingis moalae* Drake and Poor (1943, p. 195, fig.).

Fixation: Drake and Poor (1943, p. 195), by monotypy and original designation.

Later citation: Monte (1947, p. 7).

Distribution of species: Oceanic.

Number of species: 1.

***Australotingis* Hacker** (1927, p. 29).

Type species: *Australotingis franzeni* Hacker (1927, p. 29, fig.).

Fixation: Hacker (1927, p. 29), by monotypy and original designation.

Later citations: Drake and Poor (1936a, p. 384); Monte (1941, p. 152; 1947, p. 7).

Distribution of species: Australian.

Number of species: 2.

***Axiokersos* Distant** (1909a, p. 121).

Type species: *Axiokersos ovalis* Distant (1909a, p. 122).

Fixation: Distant (1909a, p. 122), by monotypy.

Later citations: Distant (1910a, p. 125, figure of type species); Monte (1947, p. 7).

Note: Distant (1909a, p. 121) erected division *Axiokersosaria* for the reception of this genus.

Distribution of species: Oriental.

Number of species: 1.

***Ayrerus* Distant** (1903c, p. 140). Synonym of *Urentius*. (New synonymy.)

Type species: *Tingis hystricellus* Richter (1869, p. 84, fig.).

Fixation: Distant (1903c, p. 140, figure of type species), by monotypy and original designation.

Later citation: Monte (1947, p. 7).

Synonymy: See *Urentius*.

Note: *Tingis hystri-cellus* (Richter) is here transferred to *Urentius*.
(New combination.)

***Baeochila* Drake and Poor (1937c, p. 400).**

Type species: *Cysteochila elongata* Distant (1903a, p. 49).

Fixation: Drake and Poor (1937c, p. 400), by monotypy and original designation.

Note: Founded as a subgenus for *Cysteochila*; raised to generic level by Drake (1948d, p. 151).

Distribution of species: Oriental (4), Malagasy (1).

Number of species: 5.

***Baeotingis* Drake and Poor (1939a, p. 96).**

Type species: *Baeotingis ogloblini* Drake and Poor (1939a, p. 96, fig.).

Fixation: Drake and Poor (1939a, p. 96) by monotypy and original designation.

Later citations: Monte (1941, p. 152; 1947, p. 7).

Distribution of species: Neotropical.

Number of species: 3.

***Baichila* Drake and Slater (1955, p. 50).**

Type species: *Baichila capeneri* Drake and Slater (1955, p. 51).

Fixation: Drake and Slater (1955, p. 51), by original designation.

Distribution of species: Ethiopian.

Number of species: 3.

***Bako* Schouteden (1923, p. 91).**

Type species: *Bako lebruni* Schouteden (1923, p. 91).

Fixation: Schouteden (1923, p. 91), by monotypy.

Later citations: Monte (1947, p. 7); Drake (1956c, p. 63).

Synonym: *Galeotingis*.

Distribution of species: Ethiopian (4), Oriental (1).

Number of species: 5.

***Belenus* Distant (1909a, p. 116).**

Type of species: *Monanthia dentatus* Fieber (1844, p. 71, fig.).

Fixation: Distant (1909a, p. 116), by original designation.

Later citations: Distant (1910a, p. 115, fig. (type species)); Monte (1947, p. 7 (*dentata* credited to Distant instead of Fieber)); Drake (1957b, p. 31).

Note: For a discussion of nomenclatorial changes and history of the genera *Belenus*, *Sakuntala*, *Ammianus*, and *Phyllontocheila*, see Drake (1957b, pp. 31-32).

Distribution of species: Ethiopian (3), Oriental (3).

Number of species: 6.

Berotingis Drake (1956b, p. 113).

Type species: *Berotingis rugiana* Drake (1956b, p. 113, fig.).

Fixation: Drake (1956b, p. 113), by original designation.

Distribution of species: Oceanic.

Number of species: 3.

Birabena Drake and Hurd (1945, p. 127).

Type species: *Birabena birabeni* Drake and Hurd (1945; p. 128, fig.).

Fixation: Drake and Hurd (1945, p. 128), by original designation.

Later citation: Monte (1947, p. 7).

Distribution of species: Neotropical.

Number of species: 4.

Birgitta Lindberg (1927, p. 18). Synonym of *Leptoyppha*.

Type species: *Tingis (Birgitta) wuerontausi* Lindberg (1927, p. 18, fig.).

Fixation: Lindberg (1927, p. 18), by original designation.

Later citation: Monte (1947, p. 7).

Synonymy: See *Leptoyppha*. Synonymized by Drake and Maa (1953, p. 94).

Note: Founded as a subgenus of *Tingis*; synonymized with genus *Leptoyppha* by Drake and Maa (1953, p. 94).

Biskria Puton (1874b, p. 440).

Type species: *Dictyonota (Biskria) gracilicornis* Puton (1874b, p. 440).

Fixation: Puton (1874, p. 440), by monotypy.

Later citations: Oshanin (1912, p. 43); Monte (1947, p. 7).

Note: Founded as subgenus of *Dictyonota*, raised to generic level by Lethierry and Sevrin (1896, p. 10).

Distribution of species: Palearctic.

Number of species: 5.

Bredenbachius Distant (1903a, p. 50). Synonym of *Cysteochila*.

Type species: *Bredenbachius pictus* Distant (1903a, p. 50).

Fixation: Distant (1903a, p. 50), by monotypy.

Later citations: Distant (1903c, p. 139), fig. (type species); Drake and Poor (1937b, p. 6, discussion); Monte (1947, p. 8).

Synonymy: See *Cysteochila*. Synonymized by Bergroth (1921, p. 104).

Buna. Error for *Bunia*.

***Bunia* Schouteden (1955, p. 167).**

Type species: *Bunia ituriensis* Schouteden, 1955, p. 167.

Fixation: Schouteden (1955, p. 167), by monotypy.

Variant spelling: *Buna* (Zool. Record, 1955, p. 483).

Distribution of species: Ethiopian.

Number of species: 1.

***Bunotingis* Drake (1948d, p. 152).**

Type species: *Cysteochila camelina* Hacker (1927, p. 24, fig.).

Fixation: Drake (1948d, p. 153), by monotypy and original designation.

Distribution of species: Australian.

Number of species: 1.

***Cadamustus* Distant (1903a, p. 47). Synonym of *Stephanitis*.**

Type species: *Cadamustus typicus* Distant (1903a, p. 47).

Fixation: Distant (1903c, p. 132), by subsequent designation, fig. 95 (type species).

Later citations: Van Duzee (1917, p. 216); Drake and Poor (1936a, p. 384); China (1943, p. 246); Monte (1947, p. 8).

Synonymy: See *Stephanitis*. Synonymized by Horváth (1906a, p. 34).

***Cadmilos* Distant (1909a, p. 113). Synonym of *Galeatus*.**

Type species: *Cadmilos retiaris* Distant (1909a, p. 114).

Fixation: Distant (1909a, p. 114), by monotypy.

Later citations: Distant (1910a, p. 107, fig., type species); Van Duzee (1917, p. 216); Drake and Poor (1936a, p. 384); Monte (1947, p. 8).

Synonymy: See *Galeatus*. Synonymized by Horváth (1911b, p. 337).

Note: Distant (1911b, p. 271) questioned the synonymy of *Cadmilos* with *Galeatus* Curtis (1833), but made no counterchanges and thus did not restore the genus to its original status.

***Caenotingis* Drake (1928b, p. 283). See *Tingis* (*Caenotingis*).**

***Calliphanes* Horváth (1906a, p. 34). Synonym of *Stephanitis*.**

Type species: *Tingis mitratus* Stål (1858, p. 64).

Fixation: Horváth (1906a, p. 34), by original designation.

Later citations: Monte (1947, p. 8).

Synonymy: See *Stephanitis*. Synonymized by Drake and Maa (1953, p. 99).

Note: Erected as new name for *Stephanitis* Champion (not Stål) (1898b, p. 58).

***Callithrinicus* Horváth** (1925, p. 10).

Type species: *Callithrinicus serratus* Horváth (1925, p. 10, fig.).

Fixation: Horváth (1925, p. 10), by monotypy.

Later citation: Monte (1947, p. 8).

Distribution of species: Australian.

Number of species: 2.

***Caloloma* Drake and Bruner** (1924a, p. 152).

Type species: *Caloloma uhleri* Drake and Bruner (1924a, p. 152).

Fixation: Drake and Bruner (1924a, p. 152), by monotypy and original designation.

Later citations: Drake and Poor (1936a, p. 385); Monte (1941, p. 152; 1947, p. 8); Hurd (1946, p. 472).

Note: Originally described by Drake and Bruner (1924a, p. 152) from 10 specimens, Antigua (San Juan), Lesser Antilles. During the past decade, three small lots of typical specimens of this species have been received from Queensland, Australia. The latter records prove that *C. uhleri* is an Australian indigene. And since no specimens of *C. uhleri* have subsequently been netted in the West Indies, there is some doubt relative to the provenance of the type specimens. The specimens from insular America probably represent either an incidental introduction or an accidental mislabeling. The type series is in the U.S. National Museum.

Distribution of species: Australian (1), Neotropical (1, introduced)

Number of species: 1.

***Calotingis* Drake** (1918, p. 86).

Type species: *Calotingis knighti* Drake (1918, p. 87).

Fixation: Drake (1918, p. 86), by monotypy and original designation.

Later citations: Drake and Poor (1936a p. 385); Monte (1941, p. 152; 1947, p. 8); Hurd (1946, p. 454).

Synonym: *Neopachycysta*.

Distribution of species: Australian (1), Nearctic (1).

Number of species: 2.

***Campylosteira* Fieber (1844, p. 42).**

Type species: *Campylosteira falleni* Fieber (1844, p. 43, fig.).

Fixation: Oshanin (1912, p. 42), by subsequent designation.

Later citations: China (1943, p. 245); Monte (1947, p. 8).

Variant spelling: *Campylostira*, Fieber (1861, p. 131).

Note: Monte (1947, p. 8) erroneously cited *falleni* as originally described in genus *Tingis*.

Distribution of species: Palearctic (15), Ethiopian (2), Oriental (1).

Number of species: 18.

Campylostira. Variant spelling for *Campylosteira*.

***Campyloitingis* Drake and Bondar (1932, p. 89).**

Type species: *Tigara mollicula* Drake (1922a, p. 365).

Fixation: Drake and Bondar (1932, p. 89), by original designation.

Later citations: Drake and Poor (1936a, p. 385); Monte (1939, p. 66; 1941, p. 81; 1947, p. 8).

Distribution of species: Neotropical.

Number of species: 14.

***Cantinona* Distant (1913, p. 158).**

Type species: *Cantinona praecellens* Distant (1913, p. 159, fig.).

Fixation: Distant (1913, p. 159), by monotypy.

Later citation: Monte (1947, p. 8).

Distribution of species: Malagasy.

Number of species: 1.

***Catoplatus* Spinola (1837, p. 167).**

Type species: *Tingis fabricii* Stål (1868, p. 93).

Fixation: International Commission of Zoological Nomenclature, Opinion 250, 1954.

Previous selections: Oshanin (1912, p. 45); China (1943, p. 247); Monte (1947, p. 8).

Synonym: *Coscinopoea*.

Note: Opinion 250 set aside all prior selections of type species for the genus *Catoplatus* Spinola.

Distribution of species: Palearctic (15), Oriental (2).

Number of species: 16.

***Celantia* Distant (1903c, p. 137).**

Type species: *Leptodictya vagans* Distant (1903a, p. 48).

Fixation: Distant (1903c, p. 137), by monotypy and original designation.

Later citation: Monte (1947, p. 8).

Distribution of species: Oriental (2), Fossil (1, Oligocene, Isle of Wight).

Number of species: 3.

Cetiocysta Drake and Poor (1939b, p. 205). Synonym of *Penottus*. (New synonymy.)

Type species: *Diplocysta nimia* Drake (1927a, p. 54).

Fixation: Drake and Poor (1939b, p. 205), by original designation.

Later citation: Monte (1947, p. 9).

Synonymy: See *Penottus*.

Note: Drake and Maa (1953, p. 88; 1954, p. 115) described two new species in genus *Penottus* but failed to place *Cetiocysta* in synonymy.

***Cochlochila* Stål** (1873, p. 133).

Type species: *Monanthia (Cochlochila) bullata* Stål (1873, p. 133).

Fixation: Stål (1873, p. 133), by monotypy.

Later citations: Monte (1947, p. 9); Drake (1948c, p. 181).

Synonym: *Physodictyon*.

Note: Founded as a subgenus of *Monanthia*, raised to generic level by Horváth (1910, p. 67).

Distribution of species: Ethiopian (8), Oriental (3), Palearctic (4).

Number of species: 13.

***Codotingis* Drake** (1942a, p. 360).

Type species: *Codotingis recurva* Drake (1942a, p. 361).

Fixation: Drake (1942a, p. 361), by monotypy and original designation.

Later citation: Monte (1947, p. 9).

Distribution of species: Australian.

Number of species: 1.

***Collinutius* Distant** (1903c, p. 134).

Type species: *Tingis alicollis* Walker (1873, p. 182).

Fixation: Distant (1903c, p. 134, fig. 98), by monotypy and original designation.

Later citations: Monte (1947, p. 9).

Distribution of species: Oriental.

Number of species: 1.

***Compseuta* Stål** (1873, p. 133).

Type species: *Tropidocheila ornatella* Stål (1855a, p. 37).

Fixation: Distant (1904, p. 433), by subsequent designation.

Later citations: Distant (1910a, p. 105); Monte (1947, p. 9).

Note: Founded as a subgenus of *Monanthia*, raised to generic level by Distant (1904, p. 433).

Distribution of species: Ethiopian (16), Australian (1), Oriental (1), Palearctic (1).

Number of species: 18.

Conchochila Drake (1958b, p. 329). Lapsus for *Conchotingis*. (New synonymy.)

Synonymy: See *Conchotingis*.

Note: Through oversight, Drake (1958b, pp. 329–331) failed to change the generic name of two tingids from Madagascar (described by him as “*Conchochila sundra*, new species,” and “*C. insulana*, new species,”) to *Conchotingis* Drake (1954, p. 71), although the generic description of *Conchochila* was deleted. The latter generic name is here suppressed as a synonym of *Conchotingis*, and *sundra* and *insulana* are transferred to *Conchotingis*.

***Conchotingis* Drake (1954b, p. 71).**

Type species: *Xenotingis trepidantis* Drake (1927b, p. 310).

Fixation: Drake (1954b, p. 72), by monotypy and original designation.

Synonym: *Conchochila*. (New synonymy.)

Distribution of species: Malagasy.

Number of species: 3.

***Congochila* Drake (1954d, p. 8).**

Type species: *Congochila congoana* Drake (1954d, p. 9).

Fixation: Drake (1954d, p. 9), by monotypy and original designation.

Distribution of species: Ethiopian.

Number of species: 1.

***Copium* Thunberg (1822, p. 8).**

Type species: *Copium cornutum* Thunberg (1822, p. 8) = *Cimex clavicornis* Linnaeus (1758, p. 442). See plate 4, herein.

Fixation: Thunberg (1822, p. 8), by monotypy.

Later citations: Oshanin (1912, p. 45); Monte (1947, p. 9). (Both as *cornutum*.)

Synonyms: *Eurycera*, *Lacometopus*, *Monanthia* (new synonymy).

Note: *Copium cornutum* Thunberg (1822, p. 8) is here suppressed as a synonym of *C. clavicornis* (Linnaeus) (1758, p. 442), the latter name having priority by 64 years. This new synonymy makes *Monanthia* a synonym of *Copium*. Of the many species formerly placed in *Monanthia*, the type species, *M. clavicornis*

(Linnaeus), belongs to *Copium*; *M. rotundata* (Herrich-Schaeffer) belongs to *Octacysta*, new genus; and the rest are all transferred herein to *Dictyla* Stål.

Validity of *Copium clavicornis* (Linnaeus): Two centuries ago Linnaeus (1758, p. 442) characterized *Cimex clavicornis* in these words:

clavicornis. 12. C. elytris abdomen occultantibus reticulato punctatis, antennis clavatis. Fn. Svec. 687. Habitat in Europa.

The citation "Fn. Svec." refers to "Fauna Svecica" by Linnaeus (1746, p. 121) and "687" refers to the description of a new *Cimex* without a specific name, the habitat of which is given as "in Uplandia. in Scania." Scania is the former name of a province in extreme southern Sweden. In the 12th edition of "Systema Naturae" Linnaeus (1767, p. 717) wrote:

clavicornis. 16. C. coleopratus, elytris nervoso-carinatis reticulato punctatis, antennis clavatis. Fn. Svec. 911. Reaum. ins. 3. t. 34. f. 1-4. Geoffr. paris. 1.p. 461. n. 56. Habitat in Europa.

By citing the two references above, Linnaeus (1767, p. 717) himself provided the incontestable evidence needed to identify positively his species *Cimex clavicornis* of Europe. Réaumur (1737, p. 427, pl. 34, figs.) gave a good discussion of a gall-making insect and its galls on "fleurs du camedrys," including figures of both insect and galls. In the other reference Geoffroy (1762, p. 461) described the same insect and its galls on "chamedrys." The last sentence of Geoffroy's description reads:

La larve de cette punaise habite l'intérieur des fleurs du chamaedrys, qui avant de s'ouvrir, paroissent plus grosses & plus gonflées qu'à l'ordinaire, lorsque cette larve y est renfermée.

As Fabricius was a contemporary of Linnaeus and at times visited him, it is only natural to assume that he saw and studied the "Linnaean Collection." It is evident, too, that they were in concurrence regarding the identity of *clavicornis* as can be perceived in the following excerpt from Fabricius (1794, p. 70):

clavicornis. 10. A. elytris reticulato punctatis, antennis clavatis. *Cimex clavicornis*. Linn. Syst. nat. 2. 717.16. Fn. Svec. 911. Geoff. Ins. 1. 461. 56. Reaum. Ins. e. tab. 34. fig. 1-4. Fyesl. Helvet. 25. 480. Panz. Fn. Germ. 3. tab. 24. Habitat in Europae hortis."

Fieber (1844, p. 97, fig.) founded the genus *Laccometopus* to hold *C. clavicornis* Linnaeus and *L. kollari*, both gall-making species. Seventeen years later, this author (Fieber 1861, p. 119) again treated Linnaeus' *clavicornis* as in 1844. The host plant as cited by the above and other authors of those times is *Teucrio chamaedri* (fide Fieber).

The first and so far the only reviser of the Palearctic species of the genus *Copium*, Wagner (1954, pp. 200–209) correctly treated *Monanthia clavicornis* (Linnaeus) (1758) and *Copium cornutum* Thunberg (1822) as identical species but failed to relegate the latter to synonymy. As indicated under *Copium* and *Monanthia*, the type species of these two genera are conspecific, the latter being a junior synonym of the former. For information relative to this synonymy, suppressing of *Copium cornutum* with *C. clavicornis*, and resurrection of *Dictyla* Stål from synonymy to hold almost all of the species included in *Monanthia*, see discussions under *Copium*, *Dictyla*, *Monanthia*, and *Octacysta*. Dr. W. E. China, in personal correspondence, states that there are two specimens of tingids under the name "*Cimex clavicornis* L." in the Linnaean Collection at the Linnaean Society of London, Burlington House, Picadilly, and that one, in Linnaeus' handwriting, is labeled "*Tingis cardui* Linn." and the other (without label) is *Acalypta carinata* (Panzer). The specimen bearing the label with *C. clavicornis* L. is the thistle tingid that Linnaeus described as *C. cardui* and it agrees with the original description of *cardui*. These are plainly self-evident errors made by others in handling the Linnaean specimens during the past two centuries and need no further comments.

Distribution of species: Palearctic (8), Oriental (1).

Number of species: 9.

***Corinthus* Distant (1920, p. 155).**

Type species: *Corinthus typicus* Distant (1920, p. 156).

Fixation: Distant (1920, p. 156), by monotypy.

Distribution of species: New Zealandian.

Number of species: 1.

***Corycera* Drake (1922a, p. 368).**

Type species: *Corycera comptula* Drake (1922a, p. 369, fig.).

Fixation: Drake (1922a, p. 368), by original designation.

Later citations: Drake and Poor (1936a, p. 385); Monte (1939, p. 66; 1941, p. 84; 1947, p. 9); Hurd (1946, p. 457).

Distribution of species: Neotropical.

Number of species: 17.

***Corythaica* Stål (1873, pp. 120, 128).**

Type species: *Tingis monacha* Stål (1858, p. 64).

Fixation: Stål (1873, p. 128), by monotypy.

Later citations: Van Duzee (1917, p. 817); Drake and Poor (1936a, p. 385); Monte (1939, p. 67; 1941, p. 86; 1947, p. 9); Hurd (1945, p. 80; 1946, p. 480).

Synonyms: *Dolichocysta*, *Leptotingis*, *Typonotus*.

Distribution of species: Neotropical (11), Nearctic (4).

Number of species: 13.

***Corythauma* Drake and Poor, 1939b, p. 206.**

Type species: *Leptopharsa ayyari* Drake (1933, p. 1016).

Fixation: Drake and Poor (1939b, p. 206), by monotypy and original designation.

Later citation: Monte (1947, p. 9).

Distribution of species: Oriental (1), Ethiopian (1).

Number of species: 1.

***Corythotingis* Drake and Poor (1943, p. 195).**

Type species: *Corythotingis zimmermani* Drake and Poor (1943, p. 196, fig.).

Fixation: Drake and Poor (1943, p. 196), by monotypy and original designation.

Later citation: Monte (1947, p. 9).

Distribution of species: Oceanic.

Number of species: 1.

Corythuca. Error for *Corythucha*.

***Corythucha* Stål (1873, pp. 119, 122).**

Type species: *Tingis fuscigera* Stål (1862, p. 323).

Fixation: Van Duzee (1916, p. 25), by subsequent designation.

Later citations: Van Duzee (1917, p. 212); Drake and Poor (1936a, p. 385); Monte (1939, p. 67; 1941, p. 88; 1947, p. 9); Hurd (1946, p. 482).

Variant spelling: *Corythuca*, many authors.

Distribution of species: Nearctic (51), Neotropical (27).

Number of species: 72.

Coscinopoea Stål (1873, p. 128). Synonym of *Catoplatus*.

Type species: *Cimex carthusianus* Goeze (1778, p. 268).

Fixation: Stål (1873, p. 128), by objective synonymy.

Erroneous citation: Monte (1947, p. 9). See note below.

Synonymy: See *Catoplatus*.

Note: Stål (1873, p. 128) erected *Coscinopoea* as a subgenus of *Catoplatus* Spinola (1837) with two included species. Synonymized by Lethierry and Severin (1896, p. 20) and so treated by

Horváth (1906c, p. 85), Oshanin (1912, p. 45), and Monte (1947, p. 9). This synonymization was overlooked by China (1943, p. 247). Horváth (1906c, p. 89) synonymized *Tingis eryngii* Latreille (1804, p. 253) with *Catoplatus carthusianus* (Goeze) and treated *albidus* (Herrich-Schaeffer) as a variety of *Catoplatus carthusianus*. Through oversight, Monte (1947, p. 9) also failed to note the above synonymy in designating "*Monanthia (Coscinopoea) eryngii* Latr." as type species.

***Cottothucha* Drake and Poor** (1941, p. 162).

Type species: *Cottothucha oceanae* Drake and Poor (1941, p. 163).
 Fixation: Drake and Poor (1941, p. 162), by monotypy and original designation.
 Later citation: Monte (1947, p. 10).
 Distribution of species: Oriental.
 Number of species: 1.

***Cromerus* Distant** (1902b, p. 355).

Type species: *Monanthia invaria* Walker (1873, p. 196).
 Fixation: Distant (1902b, p. 356), by monotypy.
 Later citation: Monte (1947, p. 10).
 Distribution of species: Oriental (6), Papuan (1), Australian (1), Oceanic (1).
 Number of species: 8.

***Cysteochila* Stål** (1873, pp. 121, 129).

Type species: *Monanthia ? tingoides* Motschulsky (1863, p. 92).
 Fixation: Distant (1903c, p. 138), by subsequent designation.
 Later citations: Drake and Poor (1937b, p. 6); Monte (1947, p. 10).
 Erroneous citations: Bergroth (1921, p. 104); Horváth (1925, p. 3) (as *Cysteochila sordida* Stål).
 Synonym: *Bredenbachius*.
 Note: See Drake and Poor (1937b, pp. 6, 7) for discussion of synonymy.
 Distribution of species: Ethiopian (33), Oriental (34), Malagasy (11), Australian (4), Oceanic (2).
 Number of species: 83.

***Dasytingis* Drake and Poor** (1936b, p. 145).

Type species: *Dasytingis rudis* Drake and Poor (1936b, p. 145, fig.).
 Fixation: Drake and Poor (1936b, p. 145), by monotypy and original designation.
 Later citation: Monte (1947, p. 10).

Distribution of species: Oriental.
Number of species: 2.

Derephisia. Error for *Derephysia*.

***Derephysia* Spinola** (1837, p. 166).

Type species: *Tingis foliacea* Fallén (1807, p. 39).
Fixation: Oshanin (1912, p. 43), by subsequent designation.
Later citations: China (1943, p. 246); Monte (1947, p. 10).
Variant spelling: *Derephisia* (Monte, 1947, p. 10).
Distribution of species: Palaearctic (7), Oriental (1).
Number of species: 8.

***Dichocysta* Champion** (1898a, p. 33).

Type species: *Dichocysta pictipes* Champion (1898a, p. 34, fig.).
Fixation: Champion (1898a, p. 34), by monotypy.
Later citations: Van Duzee (1916, p. 26; 1917, p. 221); Drake and Poor (1936a, p. 385); Monte (1941, p. 153; 1947, p. 10); Hurd (1946, p. 453).
Variant spelling: *Dichrocysta* (Banks 1910, p. 56).
Distribution of species: Neotropical (1), Neartic (1).
Number of species: 1.

***Diconocoris* Mayr** (1864, p. 442).

Type species: *Diconocoris javanus* Mayr (1864, p. 442).
Fixation: Mayr (1864, p. 442), by monotypy.
Later citations: Drake (1937, p. 386, fig., type species); Monte (1947, p. 10).
Synonym: *Diplogomphus*.
Distribution of species: Oriental.
Number of species: 7.

Dictiotingis. Error for *Dictyotingis*.

Dichrocysta. Error for *Dichocysta*.

***Dictyla* Stål** (1874, p. 57).

Type species: *Monanthia platyoma* Fieber (1861, p. 125). See plate 5, herein.
Fixation: Stål (1874, p. 57), by monotypy.
Later citations: Drake and Poor (1936a, p. 385); China (1943, p. 248); Monte (1947, p. 10).
Note: Stål (1874, p. 57) misspelled specific name as "*platyomia*"; others have perpetuated this error. Horváth (1906c, p. 97)

wrongly suppressed the genus *Dictyla* as a synonym of *Monanthia*. The present paper resurrects and restores *Dictyla* to the generic level. See *Copium* and *Monanthia* for a discussion of synonymy which led to this action. Species being transferred from *Monanthia* to *Dictyla* are listed below under "new combinations."

Distribution of species: Ethiopian (19), Neotropical (14), Oriental (12), Palearctic (14), Nearctic (3), Australian (1), Fossil (3).

Number of species: 63.

NEW COMBINATIONS: In suppressing the genus *Monanthia* Le Peletier and Serville as a synonym of *Copium*, it becomes necessary to transfer the following species to the genus *Dictyla* Stål: *abyssinica* Drake, *ainsliei* Drake and Poor, *amitina* Horváth, *aurigana* Drake, *aurigana* subsp. *discoris* Drake, *balli* Drake, *berryi* Drake, *cheriani* Drake, *c-nigrum* Champion, *collarti* Schouteden, *coloradensis* Drake, *comes* Drake, *echii* (Schrank), *echii* var. *nigricans* Hoberlandt, *echii* var. *rufina* Seidenstücker, *ehrethiae* Gibson, *femoralis* (Stål), *figurata* Drake, *flavipes* Signoret, *formosa* Drake, *fulvescens* Kirichenko, *gerardi* Schouteden, *haitiensis* Drake and Poor, *humuli* (Fabricius), *imparis* Drake, *indigena* (Wollaston), *indigena* var. *bugioensis* (China), *laberculata* Uhler, *leporis* Drake, *leroyi* Schouteden, *loricata* Distant, *lupuli* Herrich-Schaeffer, *lupata* Drake and Poor, *montandoni* Horváth, *montandoni* var. *rivalis* Horváth, *monotropidia* (Stål), *nassata* Puton, *nodipennis* Horváth, *parilis* Drake, *parmata* Distant, *patquiana* Drake, *picturata* Distant, *platyoma* Fieber, *pongana* Drake, *pucallpana* Drake and Hambleton, *putoni* Montandon, *putoni* var. *pulla* Horváth, *rasilis* Drake and Maa, *ruandae* Schouteden, *ruficeps* Horváth, *salicorum* (Baba), *sahlbergi* Horváth, *sauteri* Drake, *sentata* Drake and Hambleton, *seorsa* Drake and Poor, *seorsa* var. *inflata* Drake and Poor, *seorsis* Drake and Poor, *sjostedti* Horváth, *subdola* Horváth, *sufflata* Drake and Poor, *symphyti* (Vallot), *triconula* Seidenstücker, *tuberosa* Horváth, *uichancoi* Drake and Poor, *vulcanorum* Schouteden, *uniseriata* (Horváth), *veterna* Scudder, *zavattarii* Mancini, and the fossils *wollastoni* (Heer) and *flexuosa* (Novak).

***Dictyonota* Curtis (1827, p. 154).**

Type species: *Dictyonota strichnocera* Fieber (1844, p. 95, fig.).

Fixation: International Commission on Zoological Nomenclature, Opinion 251, 1954.

Previous selections: Oshanin (1912, p. 43); China (1943, p. 246) (as *strichnocera*).

Invalid citations: Hurd (1946, p. 461); Monte (1947, p. 10).

Valid subgenera: *Dictyonota*, *Alcletha*, *Elina*, *Kalama*. (Horváth (1906c, p. 39) divided the genus *Dictyonota* into these four subgenera.)

Synonym: *Scraulia*. Synonymized with genus by Kirkaldy (1900, p. 241) and later delimited to subgenus *Dictyonota* (*Dictyonota*) by Horváth (1906c, p. 39).

Note: Opinion 251 set aside all prior designations of type species for the nominal genus *Dictyonota* Curtis (1827). Hurd (1946, p. 461) and Monte (1947, p. 10) both wrongly cited the type species as *Dictyonota eryngii* (Latreille) (described as *Tingis*), the same species incorrectly cited and designated by Curtis at the time he erected the genus *Dictyonota*. (Misidentified genotype.)

Distribution of species: Palearctic (24), Oriental (2), Ethiopian (1), Nearctic (1, introduced).

Number of species: 26.

***Dictyonota* (*Dictyonota*) Curtis (1827, p. 154).**

Type species: Cited under the genus.

Later citation: China (1943, p. 246).

Synonym: *Scraulia*. Synonymized with subgenus by Horváth (1906c, p. 39).

Note: Oshanin (1912, p. 43) erroneously credited the subgenus *Dictyonota* (*Dictyonota*) to Kirkaldy (1900, p. 241).

Distribution of species: Palearctic (7), Oriental (1), Ethiopian (1).

Number of species: 9.

***Dictyonota* (*Alcletha*) Kirkaldy (1900, p. 241).**

Type species: *Acanthia tricornis* Schrank (1801, p. 67).

Fixation: Kirkaldy (1900, p. 241), by original designation.

Later citations: Oshanin (1912, p. 43); China (1943, p. 246).

Synonyms: *Dictyonota* of Stål (1874, p. 49) (not Curtis), synonymized by Horváth (1906c, p. 40); *Dictyonota* of Lethierry and Severin (1896, p. 7) (not Curtis).

Note: Kirkaldy (1900, p. 241) proposed *Alcletha* as a new generic name for *Dictyonota* of Lethierry and Severin (1896, p. 7) (not Curtis). Reduced to subgeneric level by Horváth (1906c, p. 40).

Distribution of species: Palearctic (5), Oriental (1), Nearctic (1, introduced).

Number of species: 5.

***Dictyonota* (*Elina*) Ferrari (1878, p. 84).**

Type species: *Dictyonota beckeri* Jakovlev (1871, p. 25).

Fixation: Ferrari (1878, p. 84), by monotypy.

Later citation: Oshanin (1912, p. 43).

Distribution of species: Palearctic.

Number of species: 7.

***Dictyonota* (Kalama) Puton** (1876, p. 34).

Type species: *Dictyonota (Kalama) coquereli* Puton (1876, p. 34).

Fixation: Oshanin (1912, p. 43), by subsequent designation.

Distribution of species: Palearctic.

Number of species: 5.

Dictyonota of Lethierry and Severin (1896, p. 7) (not Curtis). See *Dictyonota (Alcletha)*.

Dictyonota of Stål (1874, p. 49) (not Curtis). See *Dictyonota (Alcletha)*.

***Dictyotingis* Drake** (1942b, p. 8).

Type species: *Dictyotingis gibberis* Drake (1942b, p. 8).

Fixation: Drake (1942b, p. 8), by monotypy and original designation.

Later citation: Monte (1947, p. 10).

Variant spelling: *Dictiotingis* (Monte, 1947, p. 10).

Distribution of species: Oriental.

Number of species: 2.

***Dicysta* Champion** (1897, p. 5).

Type species: *Dicysta vitrea* Champion (1897, p. 5, fig.).

Fixation: Champion (1897, p. 5), by monotypy.

Later citations: Drake and Poor (1936a, p. 385); Monte (1939, p. 68; 1941, p. 92; 1947, p. 10); Hurd (1946, p. 477).

Distribution of species: Neotropical (10), Australian (2).

Number of species: 12.

***Diplocysta* Horváth** (1925, p. 11).

Type species: *Diplocysta bilobata* Horváth (1925, p. 12, fig.).

Fixation: Horváth (1925, p. 12), by monotypy.

Later citation: Monte (1947, p. 10).

Distribution of species: Australian.

Number of species: 3.

Diplogomphus Horváth (1906b, p. 296). Synonym of *Diconocoris*.

Type species: *Diplogomphus capusi* Horváth (1906b, p. 296, fig.).

Fixation: Horváth (1906b, p. 296), by monotypy.

Later citation: Monte (1947, p. 11).

Synonymy: See *Diconocoris*. Synonymized by Drake (1937, p. 386).

Dolichocysta Champion (1898b, p. 56). Synonym of *Corythaica*.

Type species: *Dolichocysta venusta* Champion (1898b, p. 57, fig.).

Fixation: Champion (1898b, p. 57), by monotypy.

Later citations: Drake and Poor (1936a, p. 385); Monte (1947, p. 11).

Synonymy: See *Corythaica*. Synonymized by Hurd (1945, p. 80).

Drakella Bergroth (1922, p. 152). Synonym of *Acalypta*.

Type species: *Fenestrella ovata* Osborn and Drake (1916, p. 223, fig.).

Fixation: Bergroth (1922, p. 152), by monotypy.

Later citations: Drake and Poor (1936a, p. 385); Monte (1947, p. 11).

Synonymy: See *Acalypta*. Synonymized by Drake (1928d, p. 2).

Note: Bergroth (1922, p. 152) proposed *Drakella* as new name for *Fenestrella*.

Dulinius Distant (1903a, p. 48).

Type species: *Dulinius conchatus* Distant (1903a, p. 48).

Fixation: Distant (1903a, p. 48), by monotypy.

Later citations: Distant (1903c, p. 133, fig., type species); Monte (1947, p. 11).

Synonym: *Sankisia*.

Distribution of species: Ethiopian (6), Malagasy (1), Oriental (1).

Number of species: 8.

Dyspharsa Drake and Hambleton (1944, p. 127).

Type species: *Leptopharsa myersi* Drake (1926, p. 87).

Fixation: Drake and Hambleton (1944, p. 128), by monotypy and original designation.

Later citations: Monte (1947, p. 11); Hurd (1946, p. 467).

Distribution of species: Neotropical.

Number of species: 1.

Elasmognathus Fieber (1844, p. 90).

Type species: *Elasmognathus helferi* Fieber (1844, p. 91, fig.).

Fixation: Fieber (1844, p. 90), by monotypy.

Later citations: Distant (1903c, p. 141); Monte (1947, p. 11).

Note: The three species (Ethiopian) described by Schouteden (1953, pp. 167-169) are not members of the genus *Elasmognathus* and will be treated elsewhere.

Distribution of species: Oriental (1), Ethiopian (1).

Number of species: 2.

***Elasmotropis* Stål (1874, p. 54).**

Type species: *Monanthia echinopsidis* Fieber (1844, p. 62, fig.)=
Tingis testacea Herrich-Schaeffer (1830, Heft 118, Tab. 23).

Fixation: Stål (1874, p. 54), by monotypy.

Later citations: Oshanin (1912, p. 44); Monte (1947, p. 11).

Note: Monte (1947, p. 11) wrongly treated *Elasmotropis* Stål as a synonym of *Phyllontochila* Fieber.

Distribution of species: Palearctic.

Number of species: 3.

Elina* Ferrari (1878, p. 84). See *Dictyonota* (*Elina*).**Engynoma* Drake (1942a, p. 362).**

Type species: *Perissonemia tasmaniae* Drake and Poor (1937c, p. 402).

Fixation: Drake (1942a, p. 362), by original designation.

Later citation: Monte (1947, p. 11).

Distribution of species: Australian.

Number of species: 6.

***Eotingis* Scudder (1890, p. 359).**

Type species: *Eotingis antennata* Scudder (1890, p. 360, fig.).

Fixation: Scudder (1890, p. 360), by monotypy.

Later citations: Drake and Poor (1936a, p. 386); Monte (1941, p. 153; 1947, p. 11); Hurd (1946, p. 455).

Distribution of species: Nearctic (fossil, Florissant, Colorado; Tertiary).

Number of species: 1.

***Epimixia* Kirkaldy (1908a, p. 779). (New status.)**

Type species: *Epimixia alitophrosyne* Kirkaldy (1908a, p. 780).

Fixation: Kirkaldy (1908a, p. 780), by monotypy.

Later citations: Horváth (1925, p. 16); Monte (1947, p. 5).

Note: Transferred herein to subfamily Tinginae from subfamily Agrammatinae. [An examination of the type of *Agramma nigriceps* Signoret (1881, p. L) from New Caledonia, which is in the Naturhistorisches Museum (Wien), shows that this species belongs to the Australian genus *Epimixia* Stål, and it is here so transferred (new combination).]

Distribution of species: Australian (6), New Zealandian (1).

Number of species: 7.

***Esocampylia* Hacker** (1929, p. 326).

Type species: *Esocampylia incarinata* Hacker (1929, p. 326, fig.).
Fixation: Hacker (1929, p. 326), by monotypy and original designation.
Later citation: Monte (1947, p. 11).
Distribution of species: Australian.
Number of species: 2.

***Eteoneus* Distant** (1903c, p. 129).

Type species: *Serenthia dilata* Distant (1903a, p. 46).
Fixation: Distant (1903c, p. 129), by monotypy and original designation, fig. (type species).
Later citation: Monte (1947, p. 11).
Distribution of species: Oriental (9), Ethiopian (4), Oceanic (2).
Number of species: 14.

***Euahanes* Distant** (1911a, p. 42).

Type species: *Euahanes inflatus* Distant (1911a, p. 43, fig.).
Fixation: Distant (1911a, p. 43), by monotypy.
Later citation: Monte (1947, p. 12).
Distribution of species: Ethiopian.
Number of species: 1.

***Euaulana* Drake** (1945, p. 96).

Type species: *Euaulana ferritincta* Drake (1945, p. 96).
Fixation: Drake (1945, p. 96), by original designation.
Later citation: Monte (1947, p. 12).
Distribution of species: Australian.
Number of species: 2.

***Eurycera* Laporte** (1833, p. 49). Synonym of *Copium*.

Type species: *Eurycera nigricornis* Laporte (1833, p. 49).
Fixation: Laporte (1833, p. 49), by monotypy.
Later citation: Monte (1947, p. 12).
Synonymy: See *Copium*. Synonymized by Lethierry and Severin (1896, p. 15).
Note: *E. nigricornis* Laporte is a synonym of *C. clavicornis* (Linnaeus), type species of *Copium*.

***Eurypharsa* Stål** (1873, pp. 122, 133).

Type species: *Tingis nobilis* Guérin (1838, p. 349).
Fixation: Stål (1873, p. 133), by monotypy.
Later citations: Drake and Poor (1936a, p. 386); Monte (1939, p. 69; 1941, p. 94; 1947, p. 12); Hurd (1946, p. 468).

Distribution of species: Neotropical.

Number of species: 5.

Fenestrella Osborn and Drake (1916, p. 222). Synonym of *Acalypta*.

Type species: *Fenestrella ovata* Osborn and Drake (1916, p. 223, fig.).

Fixation: Osborn and Drake (1916, p. 223), by monotypy and original designation.

Later citation: Monte (1947, p. 12).

Synonymy: See *Acalypta*, *Drakella*.

Note: As *Fenestrella* was preoccupied (Mollusca and Bryozoa), Bergroth (1922, p. 152) proposed *Drakella* as a new name for *Fenestrella*. Drake (1928d, p. 1) synonymized *Drakella* and *Fenestrella* with *Acalypta*.

***Froggattia* Froggatt** (1901, p. 1601).

Type species: *Froggattia olivina* Froggatt (1901, p. 1601, fig.).

Fixation: Froggatt (1901, p. 1601), by monotypy.

Later citation: Monte (1947, p. 12) wrongly credited both genus and type species to Horváth (1902) as *Froggattia olivina*.

Homonym: *Froggattia* Horváth. (New homonymy.)

Note: The olive tingid has heretofore been wrongly accredited to Horváth (1902) as *Froggattia olivina*, though the description and figure by Froggatt (1901) as *Froggattia olivina* (wrongly attributed by Froggatt himself to Horváth) has priority by almost one year. Under these circumstances the genus and species must be credited to Froggatt, and the spelling of the specific name should be *olivina* and not *olivina* Horváth, which is a synonym. (New synonymy.)

Distribution of species: Ethiopian (1), Australian (2).

Number of species: 3.

Froggattia Horváth (1902, p. 604). Homonym of *Froggattia* Froggatt. (New homonymy.)

Type species: *Froggattia olivina* Horváth (1902, p. 605).

Fixation: Horváth (1902, p. 605), by monotypy.

Later citations: Monte (1947, p. 12).

Homonymy: See *Froggattia* Froggatt.

Note: *F. olivina* Horváth is a junior synonym of *F. olivina* Froggatt.

***Furcilliger* Horváth** (1925, p. 3).

Type species: *Furcilliger asperulus* Horváth (1925, p. 4, fig.).

Fixation: Horváth (1925, p. 3), by monotypy.

Later citation: Monte (1947, p. 12).

Distribution of species: Papuan (1), Australian (1).
Number of species: 2.

Gabiobius Schouteden (1955, p. 166).

Type species: *Gabiobius basilewskyi* Schouteden (1955, p. 167).
Fixation: Schouteden (1955, p. 167), by monotypy.
Distribution of species: Ethiopian.
Number of species: 1.

Galeatus Curtis (1833, p. 196).

Type species: *Tingis spinifrons* Fallén (1807, p. 38).
Fixation: Curtis (1833, p. 196), by monotypy.
Later citations: Distant (1903c, p. 131; Oshanin (1912, p. 43); Van Duzee (1916, p. 25; 1917, p. 215); Drake and Poor (1936a, p. 386); Monte (1941, p. 153; 1947, p. 12); Hurd (1946, p. 478).
Synonym: *Cadmilos*.
Distribution of species: Palearctic (11), Oriental (3), Nearctic (2).
Number of species: 16.

Galeotingis Drake (1947a, p. 1). Synonym of *Bako*.

Type species: *Galeotingis malayana* Drake (1947a, p. 1).
Fixation: Drake (1947a, p. 1), by original designation.
Later citation: Drake (1956c, p. 63).
Synonymy: See *Bako*. Synonymized by Drake (1954e, p. 8).

Gargaphia Stål (1862, p. 324).

Type species: *Monanthia (Phyllontochila) patricia* Stål (1862, p. 324).
Fixation: Van Duzee (1916, p. 25), by subsequent designation.
Later citations: Van Duzee (1917, p. 217); Hurd (1946, p. 479).
Erroneous citations: Drake and Poor (1936a, p. 386) and Monte (1939, p. 69; 1941, p. 95; 1947, p. 12) wrongly cited year as 1873 instead of 1862.
Note: Raised from a subgenus of *Monanthia* to generic level by Stål (1873, p. 124).
Distribution of species: Neotropical (53), Nearctic (13).
Number of species: 64.

Gelchossa Kirkaldy (1904, p. 280). Synonym of *Leptopharsa*.

Type species: *Tingis oblonga* Say (1825, p. 325).
Fixation: Drake (1922a, p. 372), by subsequent designation.
Later citations: Drake and Poor (1936a, p. 386); Monte (1947, p. 12).

Synonymy: See *Leptopharsa*. Synonymized by Drake (1928, p. 21).
Note: Kirkaldy (1904, p. 280) proposed *Gelchossa* to replace *Leptostyla* Stål (1873, p. 125), which was preoccupied.

***Citava* Drake** (1948d, p. 149).

Type species: *Tigava uganda* Drake (1942b, p. 11).

Fixation: Drake (1948d, p. 149), by monotypy and original designation.

Distribution of species: Ethiopian (4), Malagasy (4).

Number of species: 8.

***Gymnotingis* Hacker** (1928, p. 181).

Type species: *Gymnotingis serrulata* Hacker (1928, p. 182, fig.).

Fixation: Hacker (1928, p. 181), by monotypy and original designation.

Later citation: Monte (1947, p. 12).

Distribution of species: Australian.

Number of species: 1.

***Habrochila* Horváth** (1912a, p. 353).

Type species: *Habrochila placida* Horváth (1912a, p. 354).

Fixation: Horváth (1912a, p. 354), by monotypy.

Later citation: Monte (1947, p. 12).

Distribution of species: Ethiopian (7), Oriental (3), Malagasy (1).

Number of species: 11.

***Haedus* Distant** (1904, p. 432).

Type species: *Haedus clypeatus* Distant (1904, p. 432, fig.).

Fixation: Distant (1904, p. 432), by monotypy.

Later citation: Monte (1947, p. 13).

Synonym: *Hormisdas*.

Distribution of species: Ethiopian (9), Oriental (4), Malagasy (1).

Number of species: 14.

***Hanuala* Kirkaldy** (1905, p. 217). See *Leptodictya* (*Hanuala*).

***Hegesidemus* Distant** (1911b, p. 270).

Type species: *Hegesidemus eliyanus* Distant (1911b, p. 270).

Fixation: Distant (1911b, p. 270), by monotypy.

Later citation: Monte (1947, p. 13).

Distribution of species: Oriental (3), Malagasy (1).

Number of species: 4.

Henrikus Drake (1955b, p. 280).

Type species: *Henrikus schoutedeni* Drake (1955b, p. 282, fig.).

Fixation: Drake (1955b, p. 281), by monotypy and original designation.

Distribution of species: Ethiopian.

Number of species: 1.

Hesperotingis Parshley (1917, p. 21).

Type species: *Hesperotingis antennata* Parshley (1917, p. 21, fig.).

Fixation: Parshley (1917, p. 21), by original designation.

Later citations: Van Duzee (1917, p. 818); Drake and Poor (1936a, p. 386); Monte (1941, p. 153; 1947, p. 13); Hurd (1946, p. 446).

Distribution of species: Nearctic.

Number of species: 7.

Holophygdon Kirkaldy (1908b, p. 364).

Type species: *Holophygdon melanesica* Kirkaldy (1908b, p. 364, fig.).

Fixation: Kirkaldy (1908, p. 364), by monotypy.

Later citation: Monte (1947, p. 13).

Distribution of species: Oceanic.

Number of species: 1.

Hormisdas Distant (1910b, p. 59). Synonym of *Haedus*.

Type species: *Hormisdas pictus* Distant (1910b, p. 60, fig.).

Fixation: Distant (1910b, p. 59), by monotypy and original designation.

Later citation: Monte (1947, p. 13).

Synonymy: See *Haedus*. Synonymized by Drake (1953b, p. 93).

Horatlas Schouteden (1957, p. 85).

Type species: *Horatlas elegantulus* Schouteden (1957, p. 85).

Fixation: Schouteden (1957, p. 85), by monotypy.

Distribution of species: Malagasy.

Number of species: 1.

Hurdchila Drake (1953b, p. 92).

Type species: *Jannacus togularis* Drake and Poor (1936c, p. 441).

Fixation: Drake (1953b, p. 93), by original designation.

Distribution of species: Oriental.

Number of species: 2.

Hyalochiton Horváth (1905, p. 566).

Type species: *Galeatus komaroffi* Jakovlev (1880, pp. 130, 133).

Fixation: Horváth (1905, p. 566), by monotypy.

Later citations: Oshanin (1912, p. 43); Monte (1947, p. 13).

Note: Created as a subgenus of *Galeatus*; raised to generic rank by Horváth (1906c, p. 48). Type species is sometimes spelled *H. komarovi*.

Distribution of species: Palearctic.

Number of species: 6.

***Hybopharsa* Hurd** (1946, p. 467).

Type species: *Leptostyla colubra* Van Duzee (1907, p. 19).

Fixation: Hurd (1946, p. 468), by monotypy and original designation.

Later citations: Monte (1947, p. 13); Hurd (1946, p. 467).

Distribution of species: Neotropical.

Number of species: 1.

***Hypsipyrgias* Kirkaldy** (1908a, p. 779).

Type species: *Hypsipyrgias telamonides* Kirkaldy (1908a, p. 779, fig.).

Fixation: Kirkaldy (1908a, p. 779), by monotypy.

Later citation: Monte (1947, p. 13).

Distribution of species: Australian.

Number of species: 1.

***Idiocysta* China** (1930, p. 141).

Type species: *Idiocysta hackeri* China (1930, p. 142, fig.).

Fixation: China (1930, p. 141), by monotypy and original designation.

Later citation: Monte (1947, p. 13).

Distribution of species: Oceanic.

Number of species: 5.

***Idiostyla* Drake** (1945, p. 97).

Type species: *Tigava anonae* Drake and Hambleton (1938a, p. 45).

Fixation: Drake (1945, p. 98), by original designation.

Later citation: Monte (1947, p. 13).

Distribution of species: Neotropical.

Number of species: 2.

***Ildefonsus* Distant** (1910a, p. 110)

Type species: *Ildefonsus provorsus* Distant (1910a, p. 110, fig.).

Fixation: Distant (1910a, p. 110), by monotypy and original designation.

Later citation: Monte (1947, p. 13).

Distribution of species: Oriental.

Number of species: 1.

***Inoma* Hacker** (1927, p. 25).

Type species: *Inoma multispinosa* Hacker (1927, p. 25, fig.).

Fixation: Hacker (1927, p. 25), by monotypy and original designation.

Later citation: Monte (1947, p. 14).

Distribution of species: Australian.

Number of species: 2.

***Inonemia* Drake** (1942a, p. 361).

Type species: *Inonemia mussiva* Drake (1942a, p. 362).

Fixation: Drake (1942a, p. 362), by original designation.

Later citation: Monte (1947, p. 14).

Distribution of species: Australian.

Number of species: 1.

***Ischnotingis* Horváth** (1925, p. 7).

Type species: *Ischnotingis proluxa* Horváth (1925, p. 8, fig.).

Fixation: Horváth (1925, p. 8), by original designation.

Later citation: Monte (1947, p. 14).

Distribution of species: Australian.

Number of species: 4.

***Jannaeus* Distant** (1909a, p. 118). Synonym of *Lasiacantha*.

Type species: *Jannaeus cuneatus* Distant (1909a, p. 118).

Fixation: Distant (1909a, p. 118), by monotypy.

Later citations: Distant (1910a, p. 117, fig., type species); Monte (1947, p. 14).

Synonymy: See *Lasiacantha*. Synonymized by Drake (1953b, p. 92).

***Kalama* Puton** (1876, p. 34). See *Dictyonota* (*Kalama*).

***Kapiriella* Schouteden** (1919, p. 138).

Type species: *Kapiriella leplaei* Schouteden (1919, p. 139).

Fixation: Schouteden (1919, p. 139), by monotypy and original designation.

Later citations: Monte (1947, p. 14); Drake (1957c, p. 206).

Synonymy: *Lembella*.

Distribution of species: Ethiopian.

Number of species: 10.

Kitoko Schouteden (1923, p. 95). Synonym of *Ammianus*.

Type species: *Phyllontocheila* (*Kitoko*) *alberti* Schouteden (1923, p. 96).

Fixation: Schouteden (1923, p. 95), by monotypy.

Synonymy: See *Ammianus*. Synonymized by Drake (1955d, p. 105)

Variant spelling: *Kotoko* (Drake, 1955d, p. 105).

Kotoko. Error for *Kitoko*.

Lacommetopus Fieber (1844, pp. 30, 96). Synonym of *Copium*.

Type species: *Cimex clavicornis* Linnaeus (1758, p. 442).

Fixation: Present designation.

Erroneous citation: Monte (1947, p. 14).

Synonymy: See *Copium*. Synonymized by Horváth (1906c, p. 91).

Note: Monte (1947, p. 14) designated *L. costatus* (Fabricius) as type species of *Lacommetopus*, which is invalid since it was not included in the original generic description. *Lacommetopus* was erected by Fieber to hold *L. clavicornis* (Linnaeus) and *L. kollari* Fieber. As no type species has heretofore been named, *L. clavicornis* (Linnaeus) is here so designated, thus fixing the synonymization by Horváth (1906c, p. 91), and others, with *Copium*.

Lambella. Error for *Lembella*.

Lasiacantha Stål (1873, p. 130).

Type species: *Tingis* (*Lasiacantha*) *hedenborgi* Stål (1873, p. 130).

Fixation: Oshanin (1912, p. 44), by subsequent designation.

Later citations: China (1943, p. 246); Drake (1953b, p. 92).

Erroneous citation: Monte (1947, p. 14) cited type species as *L. odontostoma* (Stål).

Synonyms: *Jannaeus*, *Myrmecotingis*.

Note: Stål (1874, p. 56) elevated *Lasiacantha* to generic rank from subgenus of *Tingis*.

Distribution of species: Ethiopian (10), Palearctic (4), Australian (3), Oriental (2), Malagasy (2).

Number of species: 21.

Lasiotropis Stål (1874, p. 55). See *Tingis* (*Lasiotropis*).

Lembella Schouteden (1919, p. 141). Synonym of *Kapiriella*.

Type species: *Lembella maynei* Schouteden (1919, p. 142).

Fixation: Schouteden (1919, p. 142), by monotypy and original designation.

Later citation: Monte (1947, p. 14).

Synonymy: See *Kapiriella*. Synonymized by Drake (1953b, p. 93).

Variant spelling: *Lambella* (Drake, 1948e, p. 76).

***Leptobyrsa* Stål (1873, pp. 119, 123).**

Type species: *Tingis steini* Stål (1858, p. 64).

Fixation: Stål (1873, p. 123), by monotypy.

Later citations: Van Duzee (1916, p. 25; 1917, p. 216); Drake and Poor (1936a, p. 386); Monte (1939, p. 71; 1941, p. 101; 1947, p. 14).

Note: Species of tingids included in *Leptobyrsa* by Banks (1910, p. 56), Van Duzee (1916, p. 25), and Osborn and Drake (1916, p. 240) belong to the genus *Stephanitis*. Van Duzee (1917, p. 216) wrongly treated *Leptobyrsa* Stål as a synonym of *Stephanitis* Stål.

Distribution of species: Neotropical.

Number of species: 8.

***Leptocysta* Stål (1873: pp. 121, 127).**

Type species: *Tingis sexnebulosa* Stål (1858, p. 64).

Fixation: Stål (1873, p. 127), by monotypy.

Later citations: Drake and Poor (1936a, p. 386); Monte (1939, p. 71; 1941, p. 103; 1947, p. 14).

Distribution of species: Neotropical.

Number of species: 4.

Leptodicta. Error for *Leptodictya*.

***Leptodictya* Stål (1873, pp. 121, 127).**

Type species: *Monanthia ochropa* Stål (1858, p. 62).

Fixation: Oshanin (1912, p. 45), by subsequent designation.

Later citations: Van Duzee (1916, p. 26; 1917, p. 218); Drake (1931, p. 120); Drake and Poor (1936a, p. 387); Monte (1939, p. 71; 1941, p. 103; 1947, p. 15); Hurd (1946, p. 452).

Valid subgenera: *Leptodictya*, *Hanuala*. Drake (1931, p. 119) divided the genus *Leptodictya* into these two subgenera, resurrecting the genus name *Hanuala* Kirkaldy as a subgenus.

Variant spelling: *Leptodicta*, Van Duzee (1916, p. 26; 1917, p. 850).

Distribution of species: Neotropical (49), Nearctic (5).

Number of species: 52.

***Leptodictya* (*Leptodictya*) Stål (1873, pp. 121, 127).**

Type species: Cited under genus.

Distribution of species: Neotropical.

Number of species: 1.

***Leptodictya (Hannuala) Kirkaldy* (1905, p. 217).**

Type species: *Hannuala leinahoni* Kirkaldy (1905, p. 217).

Fixation: Kirkaldy (1905, p. 217), by monotypy.

Later citations: Drake and Poor (1936a, p. 386); Monte (1947, p. 13).

Note: Drake (1931, p. 119) resurrected genus *Hannuala* Kirkaldy from synonymy and made it a subgenus of *Leptodictya* Stål.

Distribution of species: Neotropical (48), Nearctic (5).

Number of species: 51.

***Leptopharsa* Stål (1873, pp. 122, 126).**

Type species: *Leptopharsa elegantula* Stål (1873, p. 126).

Fixation: Drake (1922a, p. 370), by subsequent designation.

Later citations: Drake (1928c, p. 21); Drake and Poor (1936a, p. 387); Monte (1939, p. 72; 1941, p. 108; 1947, p. 15); Hurd (1946, p. 465).

Synonyms: *Leptostyla*, *Gelchossa*.

Distribution of species: Neotropical (93), Nearctic (5), Australian (2), Ethiopian (2), Malagasy (1).

Number of species: 103.

***Leptostyla* Stål (1873, pp. 120, 125). Synonym of *Leptopharsa*.**

Type species: *Tingis oblonga* Say (1825, p. 325).

Fixation: Drake (1922a, p. 372), by subsequent designation.

Later citations: Drake and Poor (1936a, p. 387); Monte (1947, p. 15).

Synonymy: See *Leptopharsa*. Synonymized by Drake (1928c, p. 21).

Note: As *Leptostyla* was preoccupied (Diptera), Kirkaldy (1904, p. 280) proposed the name *Gelchossa* to replace the hemipterous genus *Leptostyla* Stål.

***Leptotingis* Monte (1938, p. 128). Synonym of *Corythaica*.**

Type species: *Leptotingis umbrosa* Monte (1938, p. 129).

Fixation: Monte (1938, p. 129), by monotypy and original designation.

Later citations: Monte (1939, p. 75; 1941, p. 121; 1947, p. 15); Hurd (1945, p. 80).

Synonymy: See *Corythaica*. Synonymized by Monte (1942; p. 104).

***Leptoypha* Stål (1873, pp. 121, 129).**

Type species: *Tingis mutica* Say (1859, p. 349).

Fixation: Stål (1873, p. 129), by monotypy.

Later citations: Van Duzee (1916, p. 26; 1917, p. 220); Drake and Poor (1936a, p. 387); Monte (1941, p. 121; 1947, p. 15); Hurd (1946, p. 456).

Synonym: *Birgitta*.

Distribution of species: Nearctic (8), Neotropical (4), Oriental (3), Australian (1), Palearctic (1).

Number of species: 16.

***Lepturga* Stål** (1873, pp. 119, 124).

Type species: *Lepturga nigratarsis* Stål (1873, p. 124).

Fixation: Stål (1873, p. 124), by monotypy.

Later citation: Monte (1947, p. 15).

Distribution of species: Australian (3), Oriental (1).

Number of species: 4.

***Liotingis* Drake** (1930, p. 270).

Type species: *Liotingis evidens* Drake (1930, p. 271). (Emendation.)

Fixation: Drake (1930, p. 270), by monotypy and original designation.

Later citations: Drake and Poor (1936a, p. 387); Monte (1939, p. 76; 1941, p. 122; 1947, p. 15).

Distribution of species: Neotropical.

Number of species: 4.

***Litadea* China** (1924, p. 438).

Type species: *Litadea delicatula* China (1924, p. 439, fig.).

Fixation: China (1924, p. 438), by monotypy and original designation.

Later citation: Monte (1947, p. 15).

Distribution of species: Malagasy.

Number of species: 1.

***Macrocorutha* Stål** (1873, p. 123). (New status.)

Type species: *Tingis rhomboptera* Fieber (1844, p. 103, fig.).

Fixation: Stål (1873, p. 123), by monotypy.

Later citation: Monte (1947, p. 15).

Note: Founded as a subgenus of *Corythucha*, raised herein to generic level.

Distribution of species: Oriental.

Number of species: 1.

***Macrotingis* Champion** (1897, p. 22).

Type species: *Macrotingis biseriata* Champion (1897, p. 22, fig.).

Fixation: Drake and Poor (1936a, p. 387), by subsequent designation.

Later citations: Monte (1941, p. 154; 1947, p. 15); Hurd (1946, p. 469).

Distribution of species: Neotropical.

Number of species: 3.

Maecenas Kirkaldy (1904, p. 280). Synonym of *Stephanitis*.

Type species: *Acanthia pyri* Fabricius (1775, p. 696).

Fixation: Present designation.

Synonymy: See *Stephanitis*. Synonymized by Horváth (1906a, p. 34).

Note: Kirkaldy (1904, p. 280) proposed *Maecenas* as a new name for *Tingis* Lethierry and Severin (not Fabricius). Since the type species for this polytypic genus has not been named, *Acanthia pyri* Fabricius is here so designated.

Mafa Hesse (1925, p. 88). (New status.)

Type species: *Mafa lanceolata* Hesse (1925, p. 89, fig.).

Fixation: Hesse (1925, p. 89), by monotypy and original designation.

Later citation: Monte (1947, p. 5).

Note: Transferred herein to subfamily Tinginae from subfamily Agrammatinae.

Distribution of species: Ethiopian.

Number of species: 1.

Malandiola Horváth (1925, p. 13).

Type species: *Malandiola simplex* Horváth (1925, p. 14, fig.).

Fixation: Horváth (1925, p. 14), by monotypy.

Later citation: Monte (1947, p. 16).

Distribution of species: Australian.

Number of species: 3.

Mecopharsa Drake (1953b, p. 96).

Type species: *Mecopharsa hackeri* Drake (1953b, p. 97).

Fixation: Drake (1953b, p. 97), by monotypy and original designation.

Distribution of species: Australian.

Number of species: 1.

Megalocysta Champion (1897, p. 5).

Type species: *Megalocysta pellucida* Champion (1897, p. 6, fig.).

Fixation: Champion (1897, p. 6), by monotypy.

Later citations: Drake and Poor (1936a, p. 387); Monte (1941, p. 123; 1947, p. 16); Hurd (1946, p. 474).

Distribution of species: Neotropical.

Number of species: 1.

***Melanorhopala* Stål (1873, p. 130).**

Type species: *Tingis (Melanorhopala) clavata* Stål (1873, p. 130).

Fixation: Van Duzee (1916, p. 26), by subsequent designation.

Later citations: Van Duzee (1917, p. 220); Drake and Poor (1936a, p. 387); Monte (1941, p. 154; 1947, p. 16); Hurd (1946, p. 446).

Note: Founded as a subgenus of *Tingis*; raised to generic level by Horváth (1908, p. 564). Lethierry and Severin (1896, p. 18) wrongly treated *Melanorhopala* as a synonym of *Lasiacantha* Stål (pro parte).

Distribution of species: Nearctic.

Number of species: 3.

***Menodora* Horváth (1912b, p. 324). See *Stephanitis (Menodora)*.**

[*Metatropis* Breddin (1907, p. 94). Family Berytidae]

Note: Zoological Record (1907, p. 380) listed *Metatropis* as the family Tingitidae. Breddin correctly described it as a *Berytidae*.]

***Mokanna* Distant (1910a, p. 111). Synonym of *Stephanitis*.**

Type species: *Mokanna princeps* Distant (1910a, p. 112, fig.).

Fixation: Distant (1910a, p. 111), by monotypy and original designation.

Later citations: China (1943, p. 246); Monte (1947, p. 16).

Synonymy: See *Stephanitis*. Synonymized by Horváth (1912b, p. 319).

***Monanthia* Le Peletier and Serville (1828, p. 653). Synonym of *Copium*. (New synonymy.)**

Type species: *Cimex clavicornis* Linnaeus (1758, p. 442).

Fixation: Westwood (1840, p. 121, synopsis), by subsequent designation. (See note below).

Later citation: China (1943, p. 248).

Invalid fixations: (1) *Monanthia echii* (Schrank) (1782, p. 276): Distant (1903e, p. 144) and Monte (1947, p. 16) wrongly spelled the author's name "Schranck." (2) *Monanthia rotundata* (Herrich-Schaeffer) (1835, p. 59) = *Tingis echii* Fabricius (1803, p. 126): Kirkaldy (1904, p. 281); Oshanin (1912, p. 45); Van Duzee (1916, p. 26; 1917, p. 223); Monte (1939, p. 388; 1941, p. 123); Drake and Poor (1936a, p. 388); Hurd (1946; p. 450). (3) *Monanthia humuli* (Fabricius) (1794, p. 77): China (1943, p. 248), in a discussion of possible type fixation, suggested that "*Cimex clavicornis* Linnaeus 1758 = ? *Acanthia humuli* Fabricius

1794''; Horváth (1906c, p. 102) treated *clavicornis* Linnaeus as a synonym of *humuli* but was in doubt to the extent that priority of Linnaeus's species was disregarded.

Synonymy: See *Copium*.

Note: Opinion 71 of the International Commission on Zoological Nomenclature (1922, pp. 16–18) ruled "The species cited by Westwood, 1840 (An Introduction to the Modern Classification of Insects, vol. 2, Synopsis, separate pagination, pages 1 to 158), as 'typical species' are to be accepted as definite designations of genotypes for the respective genera." The genus *Dictyla*, for decades a synonym of *Monanthia*, is herein resurrected to hold almost all of the species now included in *Monanthia*. See the history and discussion of *Copium clavicornis* (Linnaeus), which revealed this synonymy with genus *Copium* (p. 46); list of species transferred to *Dictyla* (p. 51); and present generic position of *M. rotundata* (p. 97).

Monosteira Costa (1860, p. 7).

Type species: *Monanthia unicastata* Mulsant and Rey (1852, p. 134).

Fixation: Costa (1860, p. 7, fig.), by monotypy.

Later citations: Oshanin (1912, p. 46); Monte (1947, p. 16).

Variant spelling: *Monostira* (various authors).

Distribution of species: Palearctic (5), Ethiopian (1).

Number of species: 5.

Monostira. Error for *Monosteira*.

Mummius Horváth (1910, p. 65).

Type species: *Mummius bicorniger* Horváth (1910, p. 65).

Fixation: Horváth (1910, p. 65), by monotypy.

Later citation: Monte (1947, p. 16).

Distribution of species: Ethiopian.

Number of species: 2.

Myrmecotingis Hacker (1928, p. 182). Synonym of *Lasiacantha*.

Type species: *Myrmecotingis leai* Hacker (1928, p. 182, fig.).

Fixation: Hacker (1928, p. 182), by monotypy and original designation.

Later citation: Monte (1947, p. 16).

Synonymy: See *Lasiacantha*. Synonymized by Hacker (1929, p. 334).

***Naochila* Drake** (1957d, p. 127).

Type species: *Cochlochila boxiana* Drake (1953a, p. 214).

Fixation: Drake (1957d, p. 128), by original designation.

Distribution of species: Ethiopian (5), Malagasy (2).

Number of species: 6.

***Neopachycysta* Hacker** (1928, p. 183). Synonym of *Calotingis*.

Type species: *Neopachycysta subopaca* Hacker, (1928, p. 184, fig.).

Fixation: Hacker (1928, p. 183), by monotypy and original designation.

Later citations: Drake and Poor (1936a, p. 388); Monte (1947, p. 16).

Synonymy: See *Calotingis*. Synonymized by Hacker (1929, p. 334).

***Neotingis* Drake** (1922a, p. 366).

Type species: *Neotingis hollandi* Drake (1922a, p. 367, fig.).

Fixation: Drake (1922a, p. 367), by monotypy and original designation.

Later citations: Drake and Poor (1936a, p. 388); Monte (1941, p. 126; 1947, p. 16).

Distribution of species: Neotropical.

Number of species: 1.

***Nesocypselas* Kirkaldy** (1908b, p. 364).

Type species: *Nesocypselas dicysta* Kirkaldy (1908b, p. 365, fig.).

Fixation: Kirkaldy (1908b, p. 365), by monotypy.

Later citation: Monte (1947, p. 16).

Distribution of species: Oceanic.

Number of species: 6.

***Nesocysta* Kirkaldy** (1908b, p. 365).

Type species: *Nesocysta rugata* Kirkaldy (1908b, p. 366).

Fixation: Kirkaldy (1908b, p. 366), by monotypy.

Later citation: Monte (1947, p. 17).

Distribution of species: Oceanic.

Number of species: 1.

***Nesotingis* Drake** (1957c, p. 402).

Type species: *Nesotingis pauliani* Drake (1957c, p. 403).

Fixation: Drake (1957c, p. 403), by original designation.

Distribution of species: Malagasy.

Number of species: 2.

***Nethersia* Horváth** (1925, p. 14). New status.

Type species: *Nethersia maculosa* Horváth (1925, p. 15, fig.).

Fixation: Horváth (1925, p. 15), by monotypy.

Later citation: Monte (1947, p. 5).

Note: Transferred herein from subfamily Agrammatinae.

Distribution of species: Australian.

Number of species: 7.

***Nobarnus* Distant** (1920, p. 156).

Type species: *Nobarnus typicus* Distant (1920, p. 157).

Fixation: Distant (1920, p. 157), by monotypy.

Later citation: Monte (1947, p. 17).

Note: Monte (1947, p. 17) listed genotype as "*N. tipycus*."

Distribution of species: Australian (1), New Zealandian (2).

Number of species: 3.

***Norba* Horváth** (1912b, p. 334). See *Stephanitis* (*Norbu*).

***Nyctotingis* Drake** (1922a, p. 362).

Type species: *Nyctotingis osborni* Drake (1922a, p. 363, fig.).

Fixation: Drake (1922a, p. 363), by monotypy and original designation.

Later citations: Drake and Poor (1936a, p. 388); Monte (1941, p. 126; 1947, p. 17).

Distribution of species: Neotropical.

Number of species: 2.

***Octacysta*, new genus** (Plates 6, 7).

Type species: *Tingis rotundata* Herrich-Schaeffer (1835, p. 59).

Fixation: Present designation.

Note: This genus is erected to hold *rotundata* (Herrich-Schaeffer), which for many years has been placed as a member of *Monanthia*. Suppressing *Monanthia* as a synonym of *Copium* and resurrecting *Dietyla* from synonymy (with *M. platyoma* as the type species) make it necessary to erect this new genus to hold *rotundata* (Herrich-Schaeffer). *Octacysta*, new genus, is separated from *Dietyla* by the eight inflated cysts (hood, each paranotum, hind process of pronotum, and two processes on discal part of each clytron).

Description: Head short, very little produced in front of eyes, unarmed or provided with two to five spines; bucculae broad, areolate, with ends meeting in front, not produced beyond apex of clypeus. Labium moderately long; laminae wide, areolate,

not meeting behind. Orifice of metathoracic scent glands indistinct. Antennae slender, moderately long, segments I and II short, III very long, IV moderately long. Pronotum tricarinate, lateral carinae short; hood rather small, inflated, not projecting anteriorly as far as eyes; paranota large, strongly reflexed, conchate, inflated; posterior process inflated. Elytra divided into usual areas, with two tumid elevations in each elytron, one at middle of and one at apex of boundary separating discoidal and sutural areas; discoidal area extending slightly beyond middle of elytra in macropterous form, much further beyond in brachyptery. Metathoracic wings well developed in macropterous form, much reduced or absent in brachyptery. Hypocostal laminae long, uniseriate. Legs slender, moderately long. Specimens illustrated are from Europe.)

Distribution of species: Palearctic.

Number of species: 1.

***Oedotisingis* Drake** (1942b, p. 19).

Type species: *Australotisingis williamsi* Drake (1928a, p. 51).

Fixation: Drake (1942b, p. 20), by monotypy and original designation.

Later citation: Monte (1947, p. 17).

Distribution of species: Neotropical.

Number of species: 2.

***Ogygotisingis* Drake** (1948d, p. 149).

Type species: *Teleonemia insularis* China (1924, p. 436, fig.).

Fixation: Drake (1948d, p. 149), by monotypy and original designation.

Distribution of species: Malagasy.

Number of species: 1.

***Olastrida* Schouteden** (1956, p. 205).

Type species: *Olastrida oleae* Schouteden (1956, p. 205).

Fixation: Schouteden (1956, p. 205), by monotypy.

Distribution of species: Ethiopian.

Number of species: 1.

***Omoplax* Horváth** (1912b, p. 336), See ***Stephanitis* (*Omoplax*)**.

***Oncochila* Stål** (1873, p. 121).

Type species: *Monanthia* (*Physatocheila*) *scapularis* Fieber (1844, p. 80, fig.).

Fixation: Stål (1873, p. 121), by monotypy.

Later citations: Oshanin (1912, p. 45); China (1943, p. 248); Monte 1947, p. 17).

Note: Monte (1947, p. 17) erroneously synonymized *Oncochila* with *Physatocheila*, and in the same paragraph also wrongly made *Oncochila* a subgenus of *Physatocheila*.

Distribution of species: Palearctic.

Number of species: 2.

***Oncophysa* Stål** (1873, pp. 121, 129).

Type species: *Monanthia vesiculata* Stål (1859, p. 259).

Fixation: Stål (1873, p. 129), by monotypy.

Distribution of species: Australian.

Number of species: 3.

***Onymochila* Drake** (1948d, p. 152).

Type species: *Cysteocheila dichopetali* Horváth (1929, p. 324).

Fixation: Drake (1948d, p. 152), by monotypy and original designation.

Distribution of species: Ethiopian.

Number of species: 1.

[*Opisthochasis* Berg (1884, p. 83). Family *Miridae*.

Note: Berg wrongly founded *Opisthochasis* as a genus of Tingidae.

Drake and Poor (1938, p. 103) properly referred it to the family Miridae.]

***Orotिंगis* Drake and Poor** (1941, p. 161).

Type species: *Orotिंगis muiri* Drake and Poor (1941, p. 161).

Fixation: Drake and Poor (1941, p. 161), by monotypy and original designation.

Later citation: Monte (1947, p. 17).

Distribution of species: Oriental.

Number of species: 1.

Orthosteira Fieber (1844, p. 46). Synonym of *Acalypta*.

Type species: *Tingis carinata* Panzer (1806, Heft 99, Tab. 20) = *Tingis cassidea* Fallén (1807, p. 37) = *Tingis cervina* Germar (1836, Fasc. 18, Tab. 22).

Fixation: China (1941, p. 130), by subsequent designation.

Later citation: China (1943, p. 245).

Erroneous citations: Drake and Poor (1936a, p. 388); Monte (1947, p. 17).

Synonymy: See *Acalypta*. Synonymized by Horváth (1906c, p. 24).

Variant spelling: *Orthostira* Fieber (1861, p. 130).

Note: Drake and Poor (1936a, p. 388) and also Monte (1947, p. 17) designated *O. cassida* (Fallén) as the type species and then erroneously treated *cassida* as a synonym of *O. musci* (Schrank).

Orthostira. Variant spelling for *Orthosteira*.

***Pachycysta* Champion** (1898b, p. 59).

Type species: *Pachycysta diaphana* Champion (1898b, p. 59, fig.).

Fixation: Champion (1898b, p. 59), by monotypy.

Later citations: Drake and Poor (1936a, p. 388); Monte (1941, p. 126; 1947, p. 17); Hurd (1946, p. 474).

Distribution of species: Neotropical.

Number of species: 4.

***Palauella* Drake** (1956b, p. 110).

Type species: *Palauella gressitti* Drake (1956b, p. 112, fig.).

Fixation: Drake (1956b, p. 111), by monotypy and original designation.

Distribution of species: Oceanic.

Number of species: 1.

***Paracopium* Distant** (1902b, p. 354).

Type species: *Dictyonota cingalensis* Walker (1873, p. 178).

Fixation: Distant (1902b, p. 354), by monotypy.

Later citation: Monte (1947, p. 17).

Distribution of species: Ethiopian (18), Malagasy (8), Oriental (5), Australian (4), Oceanic (1), Palearctic (1), New Zealandian (1).

Number of species: 37.

***Parada* Horváth** (1925, p. 3).

Type species: *Cystocheila (Parada) taeniophora* Horváth (1925, p. 2, fig.).

Fixation: Horváth (1925, p. 2), by original designation.

Later citations: Monte (1947, p. 18); Drake (1952, p. 143).

Note: Created as a subgenus of *Cystocheila*; raised to generic rank by Drake (1942b, p. 4).

Distribution of species: Australian.

Number of species: 6.

***Paseala* Schouteden** (1923, p. 93).

Type species: *Paseala arnoldi* Schouteden (1923, p. 94).

Fixation: Schouteden (1923, p. 94), by monotypy.

Later citation: Monte (1947, p. 18).

Distribution of species: Ethiopian.

Number of species: 1.

Penottus Distant (1903b, p. 254).

Type species: *Penottus jalorensis* Distant (1903b, p. 254, fig.) = *Monanthia monticollis* Walker (1873, p. 196).

Fixation: Distant (1903b, p. 254), by monotypy (as *jalorensis* Distant, 1903b, p. 254 = *Monanthia monticollis* Walker, 1873, p. 193).

Later citation: Monte (1947, p. 18) (as *jalorensis*).

Synonym: *Cetiocysta*. (New synonymy.)

Note: Distant (1902b, p. 356) stated that the single specimen of *Monanthia monticollis* Walker was in very bad condition and that it somewhat resembled a species of *Diconicoris*. A study of this specimen (pl. 8, herein) shows that the hemelytron is identical with *P. jalorensis* Distant (1903b, p. 254) and by priority *monticollis* must replace *jalorensis* as the correct name for the type species, *Penottus monticollis* (new combination).

Distribution of species: Oriental.

Number of species: 6.

Perbrinckea Drake (1956a, p. 427).

Type species: *Perbrinckea brincki* Drake (1956a, p. 427, fig.).

Fixation: Drake (1956a, p. 427), by monotypy and original designation.

Distribution of species: Ethiopian.

Number of species: 1.

Perissonemia Drake and Poor (1937b, p. 2).

Type species: *Perissonemia torquata* Drake and Poor (1937b, p. 2, fig.).

Fixation: Drake and Poor (1937b, p. 2), by original designation.

Later citation: Monte (1947, p. 18).

Distribution of species: Oriental (9), Ethiopian (4), Australian (1).

Number of species: 14.

Phaeochila Drake and Hambleton (1945, p. 358).

Type species: *Amblystira hirta* Monte (1940b, p. 284, fig.).

Fixation: Drake and Hambleton (1945, p. 358), by monotypy and original designation.

Later citation: Monte (1947, p. 18).

Distribution of species: Neotropical.

Number of species: 1.

***Phaenotropis* Horváth (1906c, p. 106).**

Type species: *Monanthia* (*Monosteira*) *parvula* Signoret (1865, p. 117).

Fixation: Oshanin (1912, p. 46), by subsequent designation.

Later citation: Monte (1947, p. 18).

Note: Erected as a subgenus of *Monosteira*; raised to generic level by Drake (1957a, 415).

Distribution of species: Palearctic (2), Ethiopian (1).

Number of species: 2.

Phyllochisme Kirkaldy (1904, p. 280). Synonym of *Physatocheila*.

Type species: *Acanthia costata* Fabricius (1794, p. 77).

Fixation: Present designation.

Synonymy: See *Physatocheila*. Synonymized by Horváth (1906c, p. 94).

Note: Kirkaldy proposed *Phyllochisme* as a new name for *Physatochila* of Lethierry and Severin (1896, p. 21) (not Fieber).

Phyllontocheila Fieber (1844, p. 59). Synonym of *Tingis* (in part).

Type species: *Monanthia ampliata* Herrich Schaeffer (1839, p. 62).

Fixation: Distant (1903c, p. 135), by subsequent designation.

Distant wrongly credited *ampliata* to Fieber instead of Herrich-Schaeffer.

Later citations: China (1943, p. 247) correctly credited Herrich-Schaeffer; Monte (1947, p. 18) erroneously gave credit of authorship of *ampliata* to Fieber.

Synonymy: See *Tingis* (in part); *Ammianus* (in part).

Variant spellings: *Phyllontochila* (Stål, 1873, pp. 120, 128 and others); *Phyllotocheila* (Monte, 1947, p. 19).

Note: Fieber erected *Phyllontocheila* as a subgenus of *Monanthia*; Stål (1873, pp. 120, 128) raised it to generic status. Synonymized with *Tingis* by Oshanin (1912, p. 44) and by China (1943, p. 247), and with *Ammianus* "as delimited by Horváth and Bergroth" (not Distant, 1903c, p. 135) by Drake (1955c, p. 5). Many species have been described and wrongly placed in the genus *Phyllontocheila* (or *Phyllontochila*) and these species have been recently transferred to the genus *Ammianus*.

Phyllontochila. Variant spelling for *Phyllontocheila*.*Phyllotingis* Walker (1873, p. 3). Family Aradidae.

Note: Walker erroneously erected *Phyllotingis* as a genus of Tingidae. Champion (1898, p. 68) correctly transferred it to the family Aradidae.]

Phyllotocheila. Error for *Phyllontocheila*.

Phymacysta Monte (1942, p. 106).

Type species: *Leptostyla tumida* Champion (1897, p. 14, fig.).

Fixation: Monte (1942, p. 107, figure of type species), by monotypy and original designation.

Later citations: Monte (1947, p. 18); Hurd (1946, p. 476).

Distribution of species: Neotropical.

Number of species: 7.

Physatocheila Fieber (1844, p. 80).

Type species: *Acanthia quadrimaculata* Wolff (1804, p. 133) = *Acanthia costata* Fabricius (1794, p. 77).

Fixation: Oshanin (1912, p. 45), by subsequent designation (as *quadrimaculata* (Wolff) = *costata* (Fabricius)).

Later citations: Van Duzee (1916, p. 26; 1917, p. 219); Drake and Poor (1936a, p. 388); Monte (1941, p. 154; 1947, p. 18); China (1943, p. 247); Hurd (1946, p. 451). (All as *quadrimaculata*.)

Synonym: *Phyllochisme*.

Variant spellings: *Physatochila* (Fieber 1861, p. 433); *Physatochilae* (Fieber 1861, p. 120).

Note: An examination of the type of *Acanthia costata* Fabricius (1794, p. 77) from "Europa boreali" shows (pl. 9, herein) that it is inseparable from *Acanthia quadrimaculata* Wolff (1804, p. 132, fig.). As the former name has priority by 10 years, *costata* is the valid name of the species, and thus is the type species of *Physatocheila*. New synonymy and new combination.)

Distribution of species: Oriental (12), Palearctic (10), Ethiopian (8), Australian (5), Nearctic (5).

Number of species: 39.

Physatochila. Variant spelling for *Physatocheila*.

Physatochila of Lethierry and Severin (1896, p. 21). See *Phyllochisme*.

Physatochilae. Variant spelling for *Physatocheila*.

Physodictyon Lindberg (1927, p. 16). Synonym of *Cochlochila*.

Type species: *Physodictyon vesicarius* Lindberg (1927, p. 17, fig.).

Fixation: Lindberg (1927, p. 17), by monotypy and original designation.

Later citation: Monte (1947, p. 18).

Synonymy: See *Cochlochila*. Synonymized by Drake (1948c, p. 179).

***Planibyrsa* Drake and Poor** (1937a, p. 164).

Type species: *Leptobyrsa splendida* Drake (1922a, p. 374, fig.).

Fixation: Drake and Poor (1937a, p. 164), by original designation.

Later citations: Monte (1939, p. 77; 1941, p. 127; 1947, p. 18).

Note: Type species misspelled in original generic description as "*splendida*."

Distribution of species: Neotropical.

Number of species: 4.

***Platychila* Puton** (1879, p. 107). Synonym of *Tingis*.

Type species: *Cimex cardui* Linnaeus (1758, p. 443).

Fixation: China (1943, p. 247), by subsequent designation.

Erroneous citation: Monte (1947, p. 19).

Synonymy: See *Tingis*. Synonymized by Horváth (1906c, p. 71).

Note: Fieber (1861, p. 119) used *Platychilae* (plural form) apparently to replace the subgenus *Phyllontocheila* Fieber (1844, p. 59) (nomen nudum; sine species). Puton (1879, pp. 106-111) validated *Platychila* (singular, correct form) as a subgenus of *Monanthia* by use of key characters and the inclusion of 11 species, and thus became the author of the subgenus instead of Fieber. Horváth (1906c, p. 71) suppressed *Platychila* as a synonym of subgenus *Tingis* of genus *Tingis*. See China (1943, p. 247) for history and type designation. Lethierry and Severin (1896, p. 18) treated *Platychila* as a synonym of *Lasiacanthia* (pro parte). Monte (1947, p. 19) erroneously designated *Platychila ampliata* Fieber (= *Phyllotochila ampliata* Fieber) (sic) as the type species.

***Platychilae* Fieber** (1861, p. 119, nomen nudum). See *Platychila*.

Note: Erected as nomen nudum, plural form, sine species. Discussed under *Platychila*.

***Platytingis* Drake** (1925a, p. 107).

Type species: *Platytingis pediades* Drake (1925a, p. 108, fig.).

Fixation: Drake (1925a, p. 108), by monotypy and original designation.

Later citation: Monte (1947, p. 19).

Distribution of species: Ethiopian (1), Malagasy (1).

Number of species: 1.

***Plerochila* Drake** (1954b, p. 69).

Type species: *Telconemia australis* Distant (1904, p. 432, fig.).

Fixation: Drake (1954b, p. 69), by original designation.

Distribution of species: Ethiopian (4), Malagasy (1).

Number of species: 4.

***Pleseobyrsa* Drake and Poor** (1937a, p. 165).

Type species: *Pleseobyrsa boliviana* Drake and Poor (1937a, p. 165).
Fixation: Drake and Poor (1937a, p. 165), by original designation.
Later citations: Monte (1939, p. 77; 1941, p. 128; 1947, p. 19);
Hurd (1946, p. 470).
Distribution of species: Neotropical.
Number of species: 10.

***Pliobyrsa* Drake and Hambleton** (1946a, p. 123).

Type species: *Leptopharsa inflexa* Drake and Hambleton (1938b, p. 54, fig.).
Fixation: Drake and Hambleton (1946a, p. 123), by original designation.
Later citation: Monte (1947, p. 19).
Note: Drake and Hambleton (1946a, p. 123) wrongly spelled the specific name as *inflata* instead of *inflexa*.
Distribution of species: Neotropical.
Number of species: 6.

***Pogonostyla* Drake** (1953a, p. 221).

Type species: *Pogonostyla intonsa* Drake (1953a, p. 222).
Fixation: Drake (1953a, p. 222), by original designation.
Distribution of species: Ethiopian (4), Malagasy (2).
Number of species: 6.

***Pontanus* Distant** (1902b, p. 354).

Type species: *Monanthia gibbiferus* Walker (1873, p. 197).
Fixation: Distant (1902b, p. 354), by monotypy.
Later citation: Monte (1947, p. 19).
Synonym: *Teratochila*.
Distribution of species: Australian (2), Oriental (1), Ethiopian (1).
Number of species: 4.

***Prionostirina* Schumacher** (1913, p. 457). Synonym of *Urentius*.

Type species: *Prionostirina nana* Schumacher (1913, p. 458).
Fixation: Schumacher (1913, p. 458), by monotypy.
Later citation: Monte (1947, p. 19).
Synonymy: See *Urentius*. Synonymized by Bergroth (1914, p. 183).

***Pseudacysta* Blatchley** (1926, p. 497).

Type species: *Aeysta perseae* Heidemann (1908, p. 103, fig.).
Fixation: Blatchley (1926, p. 497), by monotypy and original designation, refigured Heidemann's figure.

Later citations: Drake and Poor (1936a, p. 389); Monte (1941, p. 155; 1947, p. 19); Hurd (1946, p. 459).

Distribution of species: Nearctic.

Number of species: 1.

***Psilobyrsa* Drake and Hambleton** (1935, p. 148).

Type species: *Psilobyrsa aechemeae* Drake and Hambleton (1935, p. 149).

Fixation: Drake and Hambleton (1935, p. 149), by original designation.

Later citations: Monte (1941, p. 129; 1947, p. 19).

Variant spelling: *Psylobyrsa* Monte, 1941, p. 129.

Distribution of species: Neotropical.

Number of species: 2.

Psylobyrsa. Error for *Psilobyrsa*.

***Radinacantha* Hacker** (1929, p. 330).

Type species: *Radinacantha reticulata* Hacker (1929, p. 330, fig.).

Fixation: Hacker (1929, p. 330), by original designation.

Later citation: Monte (1947, p. 19).

Distribution of species: Australian (2), Malagasy (1).

Number of species: 3.

***Renaudea* Drake** (1958b, p. 332).

Type species: *Renaudea pauliani* Drake (1958b, p. 333, fig.).

Fixation: Drake (1958, p. 333), by monotypy and original designation.

Distribution of species: Malagasy.

Number of species: 1.

***Sakuntala* Kirkaldy** (1902, p. 298). Synonym of *Ammianus*.

Type species: *Sakuntala ravana* Kirkaldy (1902, p. 299).

Fixation: Kirkaldy (1902, p. 298), by monotypy and original designation.

Later citation: Monte (1947, p. 19).

Synonymy. See *Ammianus*. Synonymized by Horváth (1910, p. 62).

Note: Bergroth (1911, p. 186 pointed out that *Sakuntala* was preoccupied by Coleoptera and that *Belenus* must be maintained. See Drake 1957b, pp. 31-32.

Sanazarius Distant (1904, p. 431).

Type species: *Sanazarius cuneatus* Distant (1904, p. 431, fig.).

Fixation: Distant (1904, p. 431), by monotypy.

Later citations: Distant (1911a, p. 43); Monte (1947, p. 20).

Distribution of species: Ethiopian.

Number of species: 3.

Sankisia Schouteden (1916, p. 263). Synonym of *Dulinius*.

Type species: *Sankisia pulchra* Schouteden (1916, p. 294).

Fixation: Schouteden (1916, p. 293), by monotypy and original designation.

Later citation: Monte (1947, p. 20).

Synonymy: See *Dulinius*. Synonymized by Drake (1953b, p. 95).

Seraulia Stål (1874, p. 50). Synonym of *Dictyonota*.

Type species: *Dictyonota strichnocera* Fieber (1844, p. 95, fig.).

Fixation: Kirkaldy (1900, p. 241), by subsequent designation.

Synonymy: See *Dictyonota*. Synonymized with genus *Dictyonota* by Kirkaldy (1900, p. 241) (type species, *D. eryngii* Curtis (not Latreille) = *strichnocera* Fieber) and later delimited to subgenus *Dictyonota* by Horváth (1906c, p. 39).

Sinuessa Horváth (1910, p. 63).

Type species: *Phyllontocheila (Sinuessa) subinermis* Horváth (1910, p. 64).

Fixation: Horváth (1911b, p. 332), by subsequent designation.

Erroneous citations: Monte (1947, p. 20) cited "*Phyllontocheila (Sinuessa) alaticollis* (Stål) (= *Monanthia (Phyllontocheila) alaticollis* Stål)" as genotype. [*P. alaticollis* (Stål) belongs to the genus *Ammianus*]. Drake (1957b, p. 32) wrongly stated that Horváth (1910, p. 63) designated *P. waelbroecki* Schouteden as the type species.

Note: Founded as a subgenus of *Phyllontocheila* and raised to generic level by Drake (1957b, p. 32).

Distribution of species: Ethiopian.

Number of species: 4.

Sphaerista Kiritschenko (1951, pp. 240, 245).

Type species: *Orthostira paradoxa* Jakovlev (1880, p. 128).

Fixation: Kiritschenko (1951, p. 245, fig.), by monotypy.

Distribution of species: Palearctic.

Number of species: 1.

***Sphaerocysta* Stål** (1873, pp. 120, 128).

Type species: *Tingis* ? *globifera* Stål (1858, p. 65).

Fixation: Drake (1928a, p. 42), by subsequent designation.

Later citations: Drake and Poor (1936a, p. 389); Monte (1939, p. 78; 1941, p. 129; 1947, p. 20).

Distribution of species: Neotropical.

Number of species: 13.

***Stenocysta* Champion** (1897, p. 28).

Type species: *Stenocysta pilosa* Champion (1897, p. 29, fig.).

Fixation: Champion (1897, p. 29), by monotypy.

Later citations: Drake and Poor (1936a, p. 389); Monte (1939, p. 78; 1941, p. 132; 1947, p. 20); Hurd (1946, p. 473).

Distribution of species: Neotropical.

Number of species: 1.

***Stephanitis* Stål** (1873, pp. 119, 123).

Type species: *Acanthia pyri* Fabricius (1775, p. 696).

Fixation: Oshanin (1912, p. 130), by subsequent designation.

Later citations: Van Duzee (1916, p. 25; 1917, p. 216); Drake and Poor (1936a, p. 389); China (1943, p. 246); Monte (1939, p. 78; 1941, p. 132; 1947, p. 21); Hurd (1946, p. 481).

Valid subgenera: *Menodora*, *Norba*, *Omoplax* and *Stephanitis*. Horváth (1912b, pp. 219-312, figs.) divided the genus into these four subgenera.

Synonyms: *Cadamustus*, *Calliphanes*, *Maecenas*, *Mokanna*, *Tingis* of Laporte (not Fabricius), *Tingis* of Lethierry and Severin (not Fabricius).

Note: Fabricius (1803, p. 126) transferred *A. pyri* to genus *Tingis*.

Some authors wrongly cite *Stephanitis pyri* = *Tingis pyri* instead of "=*Acanthia pyri*." See Horváth (1912b, pp. 218-312, figs.) for descriptions and keys to subgenera and species.

Distribution of species: Oriental (42), Neotropical (8), Palearctic (6), Ethiopian (1, introduced), Nearctic (4, three introduced), Papuan (4), Australian (2, one introduced).

Number of species: 59.

***Stephanitis* (*Stephanitis*) Stål** (1873, pp. 119, 123).

Type species: Cited under genus.

Distribution of species: Oriental (28), Neotropical (8), Palearctic (6), Nearctic (4, three introduced), Papuan (2), Australian (1), Ethiopian (1).

Number of species: 43.

***Stephanitis (Menodora) Horváth* (1912b, p. 324).**

Type species: *Stephanitis (Menodora) formosa* Horváth (1912b, p. 324, fig.).

Fixation: Horváth (1912b, p. 324), by monotypy.

Distribution of species: Oriental.

Number of species: 2.

***Stephanitis (Norba) Horváth* (1912b, p. 334).**

Type species: *Stephanitis (Norba) mendica* Horváth (1912b, p. 334).

Fixation: Drake and Poor (1936a, p. 389), by subsequent designation.

Later citation: Monte (1947, p. 17).

Distribution of species: Oriental (11), Papuan (2).

Number of species: 13.

***Stephanitis (Omoplax) Horváth* (1912b, p. 336).**

Type species: *Stephanitis (Omoplax) desecta* Horváth (1912b, p. 337, fig.).

Fixation: Horváth (1912b, p. 336), by monotypy.

Distribution of species: Oriental.

Number of species: 1.

Stephanitis Champion (not Stål) (1898b, p. 58). See *Calliphanes*.

***Stymnonotus Reuter* (1887, p. 103).**

Type species: *Stymnonotus apicalis* Reuter (1887, p. 104).

Fixation: Reuter (1887, p. 104), by monotypy.

Later citation: Monte (1947, p. 20).

Distribution of species: Malagasy.

Number of species: 1.

***Tanybyrsa Drake* (1942b, p. 21).**

Type species: *Compseuta secunda* Hacker (1927, p. 27, fig.)

Fixation: Drake (1942b, p. 21), by original designation.

Later citation: Monte (1947, p. 20).

Distribution of species: Australian.

Number of species: 2.

***Tanytingis Drake* (1939, p. 205).**

Type species: *Tanytingis takahashii* Drake (1939, p. 206).

Fixation: Drake (1939, p. 205), by monotypy and original designation.

Later citation: Monte (1947, p. 20).

Distribution of species: Oriental.

Number of species: 2.

***Teleonemia* Costa (1864, p. 144).**

Type species: *Teleonemia funerea* Costa (1864, p. 145, fig.).

Fixation: Costa (1864, p. 144), by monotypy.

Later citations: Distant (1903c, p. 143); Van Duzee (1916, p. 26; 1917, p. 221); Drake and Poor (1936a, p. 389); Monte (1941, p. 133; 1947, p. 20); Hurd (1946, p. 447).

Synonyms: *Amaurosterphus*, *Americia*.

Distribution of species: Neotropical (75), Nearctic (13); introduced into Oriental (1), Oceanic (1), Australian (1).

Number of species: 83.

***Teratochila* Drake and Poor (1936b, p. 147). Synonym of *Pontanus*.**

Type species: *Teratochila puerilis* Drake and Poor (1936b, p. 147).

Fixation: Drake and Poor (1936b, p. 147), by monotypy and original designation.

Later citation: Monte (1947, p. 20).

Synonymy: See *Pontanus*. Synonymized by Drake (1956a, p. 425).

***Tigava* Stål (1858, p. 63).**

Type species: *Tigava praecellens* Stål (1858, p. 63).

Fixation: Stål (1858, p. 63), by monotypy.

Later citations: Drake and Poor (1936a, p. 389); Monte (1939, p. 80; 1941, p. 143; 1947, p. 21); Hurd (1946, p. 449).

Distribution of species: Neotropical.

Number of species: 15.

***Tigavaria* Drake (1945, p. 99).**

Type species: *Tigava unicarinata* Hacker (1929, p. 325, fig.).

Fixation: Drake (1945, p. 99), by monotypy and original designation.

Later citation: Monte (1947, p. 21).

Distribution of species: Australian.

Number of species: 1.

[*Tingiopsis* Bekker-Migdisova (1953, p. 461, fig.). Family Cercopidae.

Note: Bekker-Migdisova wrongly founded *Tingiopsis* as a genus of Tingidae. The fossil species *Tingiopsis reticulata* is represented only by a forewing. Evans (1957, p. 289, fig. 6e) is of the opinion that the wing is probably that of a homopteron and quite possibly that of a cercopid.]

***Tingis* Fabricius (1803, p. 124).**

Type species: *Cimex cardui* Linnaeus (1758, p. 443). (See plate 3, herein.)

Fixation: Latrielle (1810, p. 433), substantiated by International Commission on Zoological Nomenclature, Direction 4, 1954.

Previous selections: Oshanin (1912, p. 44); Drake and Poor (1936a, p. 390); Monte (1939, p. 81; 1941, p. 146; 1947, p. 21); China (1943, p. 247); Hurd (1946, p. 463).

Valid subgenera: *Caenotingis*, *Lasiotropis*, *Tingis*, *Tropidocheila*. Stål (1873, p. 130) divided the genus *Tingis* into four subgenera—*Tingis*, *Lasiacantha*, *Melanorhopala* and *Americia*—but only the subgenus *Tingis* remains in this genus today.

Synonyms: *Phyllontocheila* (in part), *Platycheila*.

Distribution of species: Palearctic (51), Oriental (14), Neotropical (13), Australian (13), Ethiopian (4), Nearctic (1), Fossil (6).

Number of species: 102.

***Tingis* (*Tingis*) Fabricius (1803, p. 124).**

Type species: Cited under genus.

Distribution of species: Palearctic (24), Oriental (11), Australian (9), Neotropical (7), Ethiopian (1), Nearctic (1).

Number of species: 53.

***Tingis* (*Caenotingis*) Drake (1928b, p. 283).**

Type species. *Tingis* (*Caenotingis*) *beesoni* Drake (1928b, p. 283).

Fixation: Drake (1928b, p. 283), by monotypy and original designation.

Distribution of species: Oriental.

Number of species: 1.

***Tingis* (*Lasiotropis*) Stål (1874, p. 55).**

Type species: *Monanthia* (*Platycheila*) *trichonota* Puton (1874a, p. 216).

Fixation: Oshanin (1912, p. 44), by subsequent designation.

Later citation: China (1943, p. 247).

Erroneous citation: Monte (1947, p. 14).

Note: Horváth (1906c, pp. 61, 69) made *Lasiotropis* a subgenus of *Tingis*. Monte (1947, p. 14) wrongly treated *Lasiotropis* as a valid genus, not a subgenus of *Tingis*, and then also wrongly cited the type species as "*Tingis* *grisea* Germar."

Distribution of species: Palearctic (7), Neotropical (2), Oriental (1).

Number of species: 10.

Tingis (Tropidocheila) Fieber (1844, p. 72).

Type species: *Monanthia stachydis* Fieber (1844, p. 73, fig.)=
Monanthia maculata Herrich-Schaeffer (1839, p. 56, fig.).

Fixation: Oshanin (1912, p. 44), by subsequent designation.

Invalid fixation: Monte (1947, p. 21).

Variant spellings: *Tropidochila* (many authors); *Tropidochilae*
(Fieber, 1861, p. 120).

Note: Founded as a subgenus of *Monanthia*. Horváth (1906c, pp. 79, 84) transferred subgenus *Tropidocheila* to genus *Tingis* and synonymized *Monanthia stachydis* Fieber with *Tingis maculata* (Herrich-Schaeffer). Fieber (1861, p. 130) transferred *M. maculata* to genus *Tingis*. Oshanin (1912, p. 44) designated *maculata* as the type species of subgenus *Tropidocheila*. As *M. stachydis* Fieber was one of the originally included species of *Tropidocheila* and a synonym of *maculata*, the fixation by Oshanin is valid. Monte (1947, p. 21) incorrectly designated "*Monanthia (Tropidocheila) costata* (Fabr.) (= *Acanthia costata* Fabr.)" as the type species. It should be noted that *costata* was wrongly determined by Fieber (1844, p. 74) and that the technical name is *Catoplatus fabricii* (Stål). Fieber included an excellent figure of this species.

Distribution of species: Palearctic (20), Neotropical (4), Australian (4), Ethiopian (3), Oriental (1).

Number of species: 32.

Tingis of Laporte (1833, p. 48) (not Fabricius). Synonym of *Stephanitis*.

Tingis of Lethierry and Severin (1896, p. 12) (not Fabricius). See *Maecenas*.

Trachypeplus Horváth (1926, p. 329).

Type species: *Trachypeplus jacobsoni* Horváth (1926, p. 330, fig.).

Fixation: Horváth (1926, p. 330), by monotypy.

Later citation: Monte (1947, p. 21).

Distribution of species: Oriental (4), Papuan (1).

Number of species: 5.

Tropidocheila Fieber (1844, p. 72). See ***Tingis (Tropidocheila)***.

Tropidochila. Variant spelling for *Tropidocheila*.

Tropidochilae. Variant spelling for *Tropidocheila*.

Typonotus Uhler (1893, p. 716). Synonym of *Corythaica*.

Type species: *Typonotus planaris* Uhler (1893, p. 716).

Fixation: Uhler (1893, p. 716), by monotypy.

Later citations: Monte (1941, p. 86; 1947, p. 21); Hurd (1945, p. 80).

Synonymy: See *Corythaica*. Synonymized by Champion (1897, p. 9).

Uhlerites Drake (1927a, p. 56).

Type species: *Phylloncheila debile* Uhler (1896, p. 265).

Fixation: Drake (1927a, p. 56), by monotypy and original designation.

Later citation: Monte (1947, p. 21).

Distribution of species: Oriental.

Number of species: 2.

Ulocysta Drake and Hambleton (1945, p. 364).

Type species: *Ulocysta praetabilis* Drake and Hambleton (1945, p. 365).

Fixation: Drake and Hambleton (1945, p. 364), by monotypy and original designation.

Later citation: Monte (1947, p. 21).

Distribution of species: Neotropical.

Number of species: 1.

Ulonemia Drake and Poor (1937b, p. 3).

Type species: *Perissonemia (Ulonemia) dignata* Drake and Poor (1937b, p. 3).

Fixation: Drake and Poor (1937b, p. 3), by original designation.

Later citation: Monte (1947, p. 21).

Note: Created as a subgenus by Drake and Poor (1937b, p. 3); raised to generic level by Drake (1942, p. 359).

Distribution of species: Australian (5), Oriental (4), Oceanic (1).

Number of species: 9.

Ulotingis Drake and Hambleton (1935, p. 144).

Type species: *Acysta brasiliensis* Drake (1922b, p. 42).

Fixation: Drake and Hambleton (1935, p. 145), by original designation.

Later citations: Monte (1939, p. 82; 1941, p. 148; 1947, p. 21).

Distribution of species: Neotropical.

Number of species: 5.

***Urentius Distant* (1903c, p. 134).**

Type species: *Urentius echinus* Distant (1903c, p. 134, fig.).

Fixation: Distant (1903c, p. 134), by monotypy and original designation.

Later citations: Oshanin (1912, p. 43); Monte (1947, p. 21).

Synonyms: *Ayzerus*, *Prionostirina*.

Distribution of species: Oriental (6), Palearctic (5), Ethiopian (2), Australian (1).

Number of species: 13.

***Vatiga Drake and Hambleton* (1946b, p. 10).**

Type species: *Vatiga vicosana* Drake and Hambleton (1946b, p. 10).

Fixation: Drake and Hambleton (1946b, p. 10), by original designation.

Later citations: Monte (1947, p. 21); Hurd (1946, p. 466).

Distribution of species: Neotropical.

Number of species: 10.

***Xenotingis Drake* (1923a, p. 105).**

Type species: *Xenotingis horni* Drake (1923a, p. 105, fig.).

Fixation: Drake (1923a, p. 105), by monotypy and original designation.

Later citation: Monte (1947, p. 22).

Distribution of species: Oriental (3), Papuan (2).

Number of species: 5.

***Xynotingis Drake* (1948a, p. 8).**

Type species: *Xynotingis hoytona* Drake (1948a, p. 8, fig.).

Fixation: Drake (1948a, p. 8), by monotypy and original designation.

Distribution of species: Oriental.

Number of species: 1.

***Ypsotingis Drake* (1947b, p. 229).**

Type species: *Ypsotingis sideris* Drake (1947b, p. 230, fig.).

Fixation: Drake (1947b, p. 230), by monotypy and original designation.

Distribution of species: Oriental.

Number of species: 3.

***Zatingis Drake* (1928a, p. 44).**

Type species: *Zatingis extraria* Drake, 1928a, p. 45.

Fixation: Drake (1928a, p. 45), by monotypy and original designation.

Later citations: Drake and Poor (1936a, p. 390); Monte (1941, p. 155; 1947, p. 22).

Distribution of species: Neotropical.

Number of species: 1.

Zelotingis Drake and Hambleton (1946b, p. 9).

Type species: *Stenocysta aspidospermae* Drake and Hambleton (1934, p. 444, fig.).

Fixation: Drake and Hambleton (1946b, p. 10), by monotypy and original designation.

Later citation: Monte (1947, p. 22).

Distribution of species: Neotropical.

Number of species: 1.

SUMMARY OF NOMENCLATORIAL CHANGES

FAMILY GROUP

Agrammatinae, emendation, correct spelling for Agramminae.

Acalyptini Blatchley, synonymized with Tinginae.

Aidoneusaria Distant, synonymized with Tinginae.

Axiokersosaria Distant, synonymized with Tinginae.

Galeatini Blatchley, synonymized with Tinginae.

Monanthiini Costa, synonymized with Tinginae.

Physatocheilini Blatchley, synonymized with Tinginae.

GENUS GROUP

Aframixia, new genus.

Ayrerus Distant, synonymized with *Urentius* Distant.

Cetiocysta Drake and Poor, synonymized with *Penotlus* Distant.

Conchochila Drake, synonymized with *Conchotingis* Drake.

Dictyla Stål, resurrected as a valid generic name to hold most species formerly classified in *Monanthia*.

Epimixia Kirkaldy, transferred from subfamily Agrammatinae to subfamily Tinginae.

Froggattia Froggatt, given authorship priority over Horváth.

Froggattia Horváth, made a homonym of *Froggattia* Froggatt.

Macrocorytha Stål, raised from subgeneric to generic level.

Maja Hesse, transferred from subfamily Agrammatinae to subfamily Tinginae.

Monanthia Le Peletier and Serville, synonymized with *Copium* Thunberg.

Minitingis Barber, synonymized with *Zetckella* Drake.

Nethersia Horvath, transferred from subfamily Agrammatinae to subfamily Tinginae.

Octacysta, new genus.

SPECIES GROUP

Agramma nigriceps Signoret, transferred to genus *Epimixia*.

Ayrerus hystriellus (Richter), transferred to genus *Urentius*.

Conchochila insulana Drake, transferred to genus *Conchotingis*.

Conchochila sundra Drake, transferred to genus *Conchotingis*.

Copium clavicornis (Linnaeus) becomes type species of genus *Copium*.

Copium cornutum Thunberg, synonymized with *Copium clavicornis* (Linnaeus).

Dictyla species, list of species transferred to this genus will be found on page 51.

SPECIES GROUP—Continued

- Eotingis quinquecarinata* (Germar and Berendt), transferred to genus *Cantacader*.
- Epinixia roboris* Drake, transferred to *Aframixia*, new genus, and designated type species.
- Froggattia olivinia* Froggatt, given priority over *Froggattia olivina* Horváth.
- Lacometopus clavicornis* (Linnaeus), designated type species of the genus.
- Lullius* ? *minor* Distant, transferred to genus *Agramma*.
- Maecenas pyri* (Fabricius), designated type species of the genus.
- Minitingis minusculus* Barber, transferred to genus *Zetckella*.
- Monanthia clavicornis* (Linnaeus), transferred to genus *Copium*.
- Monanthia monticollis* Walker, transferred to genus *Penottus*.
- Monanthia rotundata* (Herrieh-Schaeffer), transferred to *Octacysta*, new genus, and designated type species.
- Paracopium costata* (Fabricius), transferred to genus *Physatocheila*.
- Penottus monticollis* (Walker), designated type species of the genus.
- Penottus jalorensis* Distant, synonymized with *Penottus monticollis* (Walker).
- Phyllochisme costata* (Fabricius), designated type species of the genus.
- Physatocheila costata* (Fabricius), through synonymy becomes type species of the genus.
- Physatocheila quadrimaculata* (Wolff), synonymized with *Physatocheila costata* (Fabricius).

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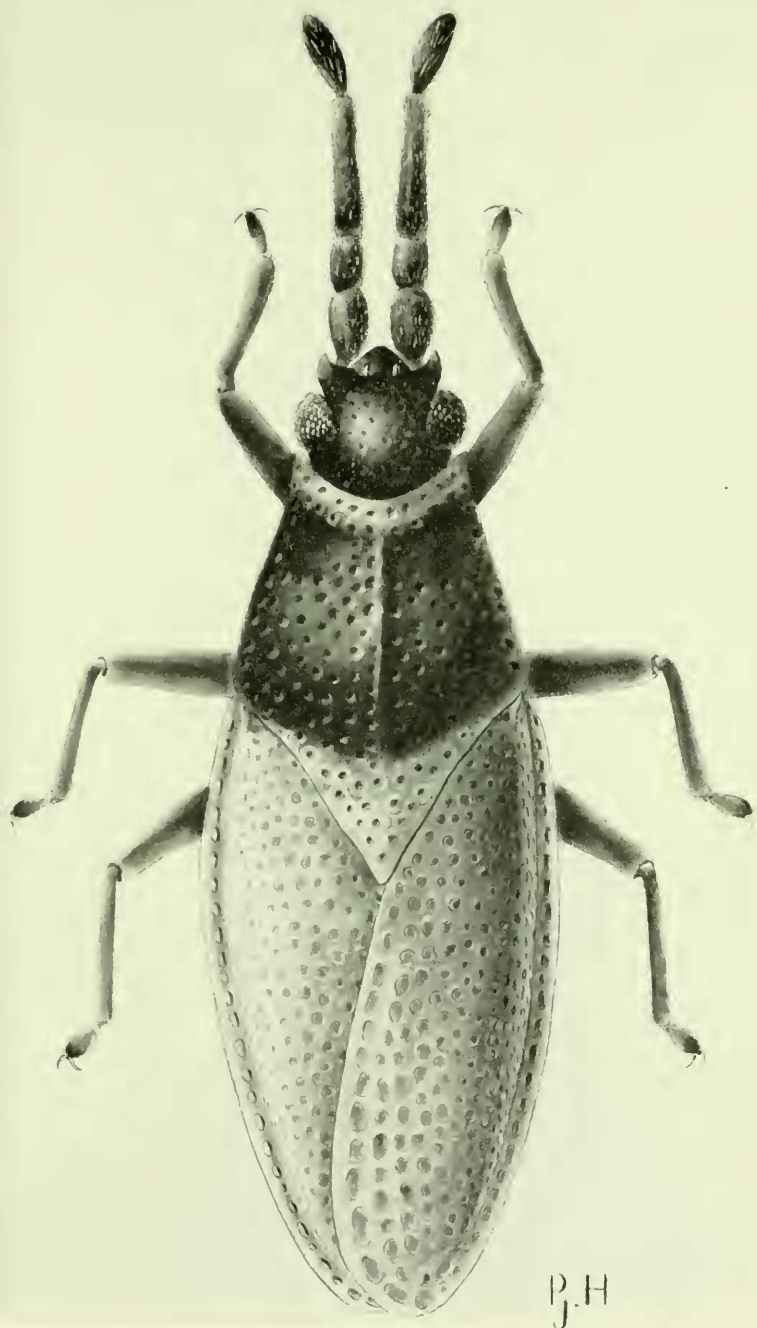
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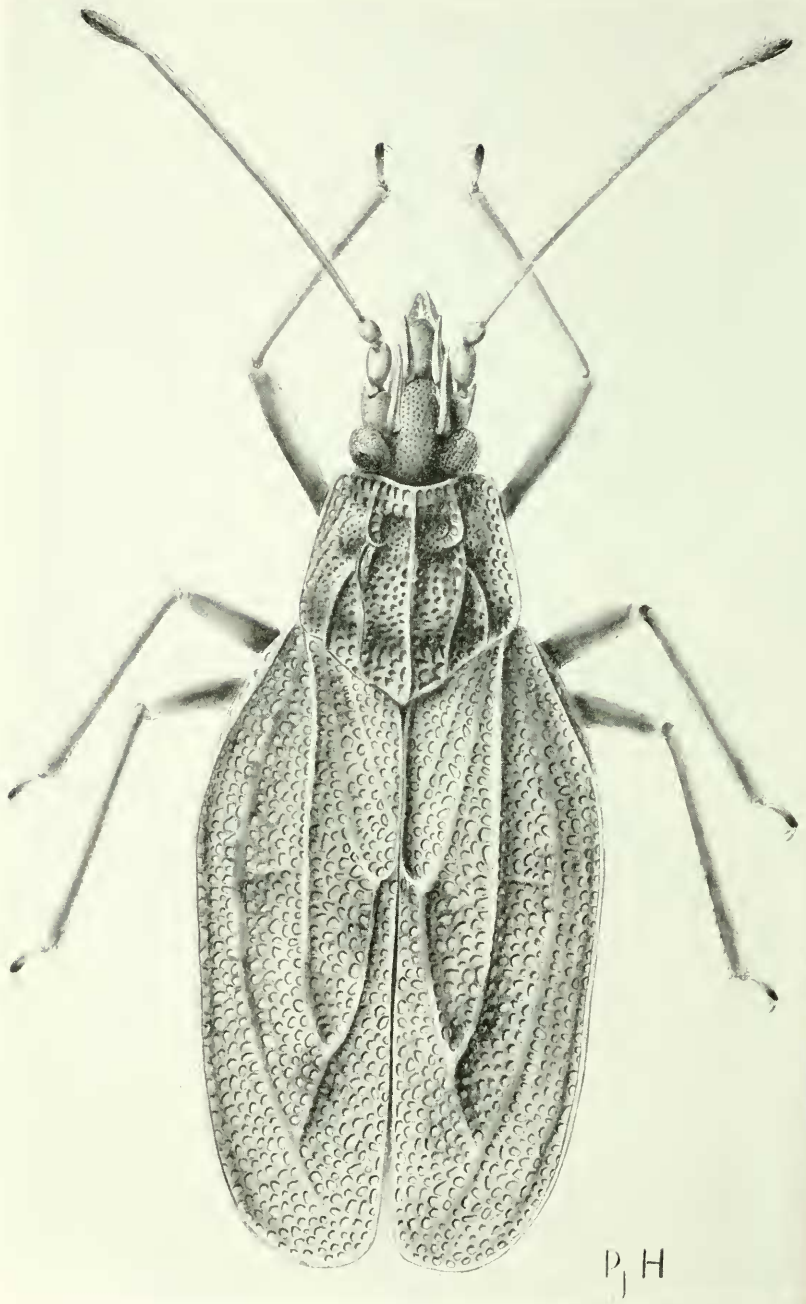
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PLATES 1-9

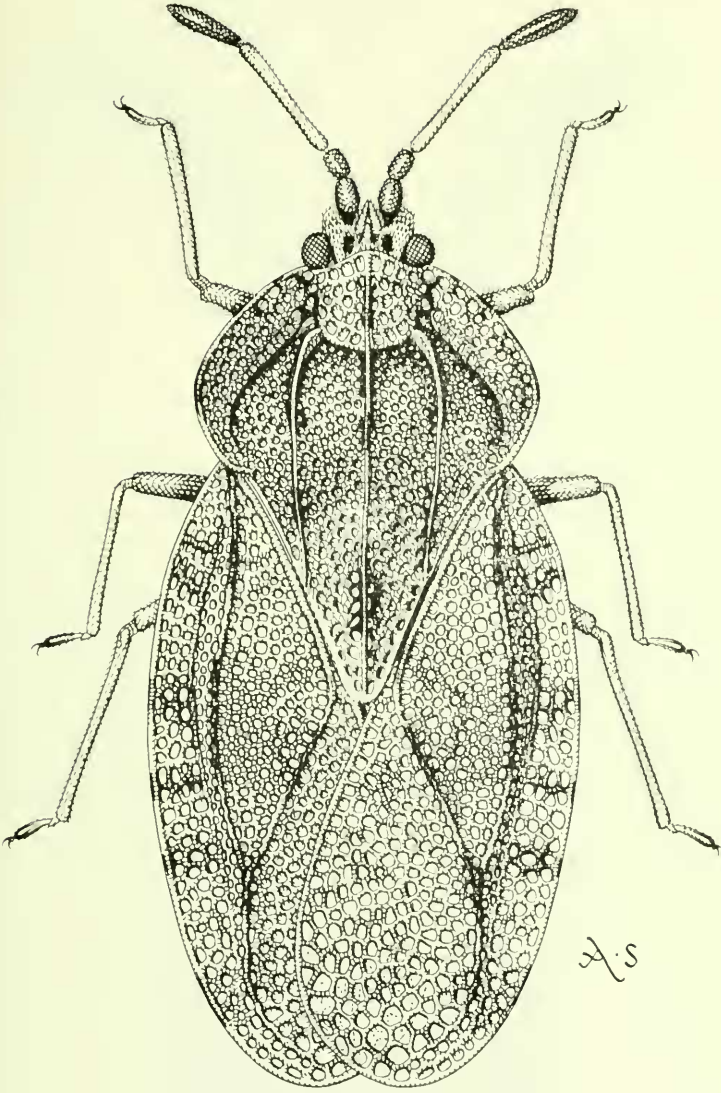


Agramma laeta (Fallén).

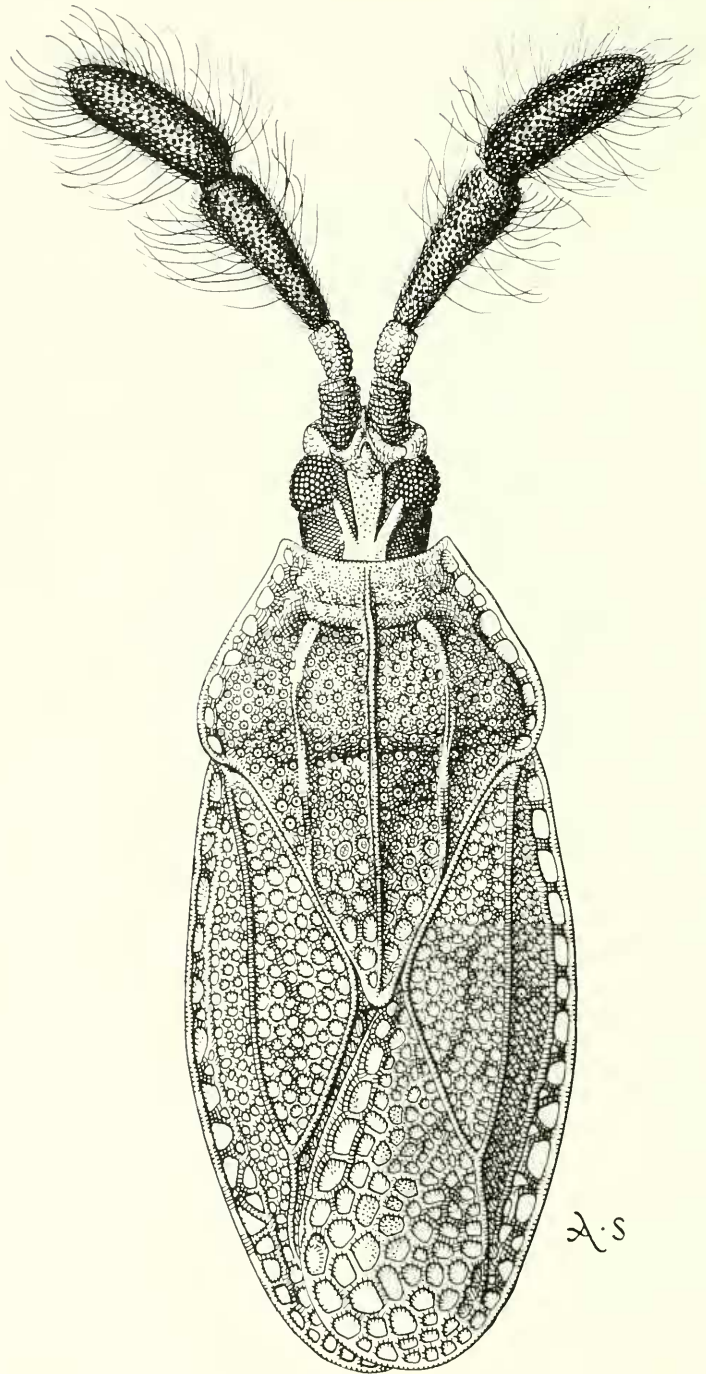


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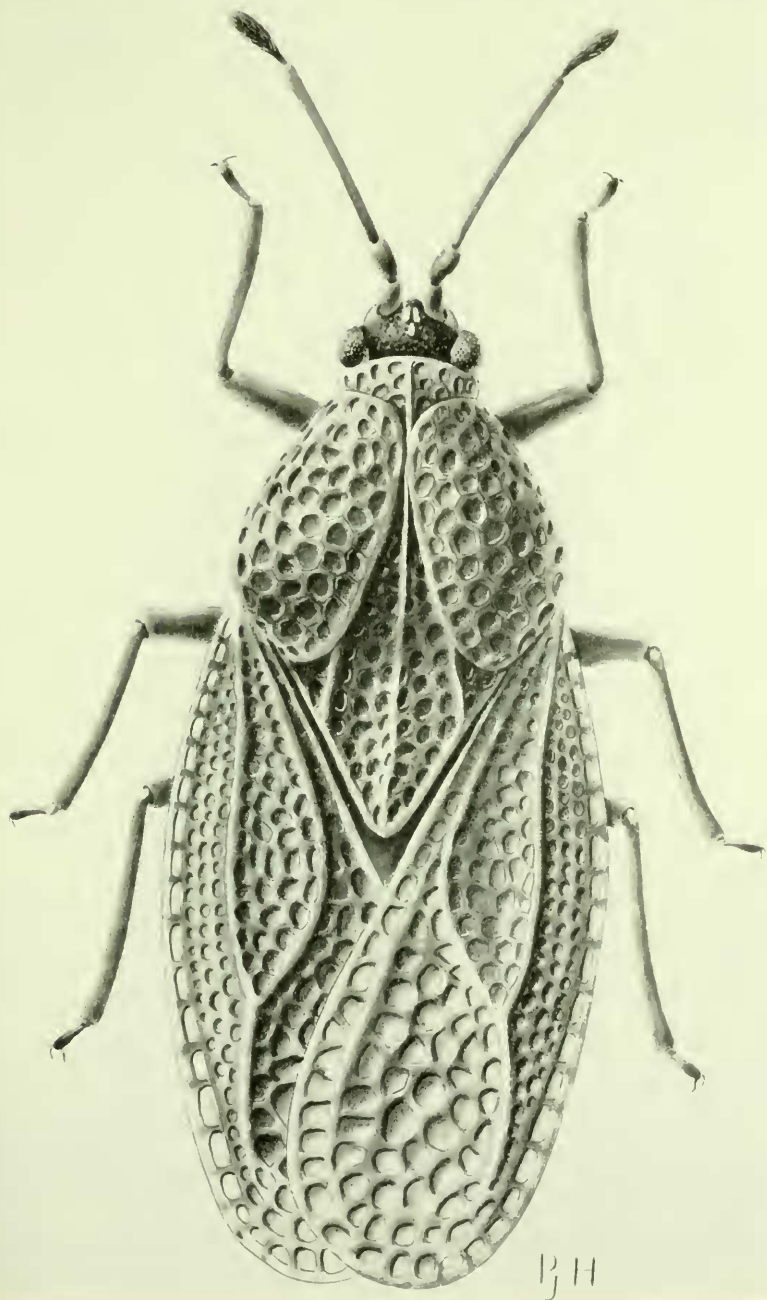
Cantacader quadricornis (Le Peletier and Serville).



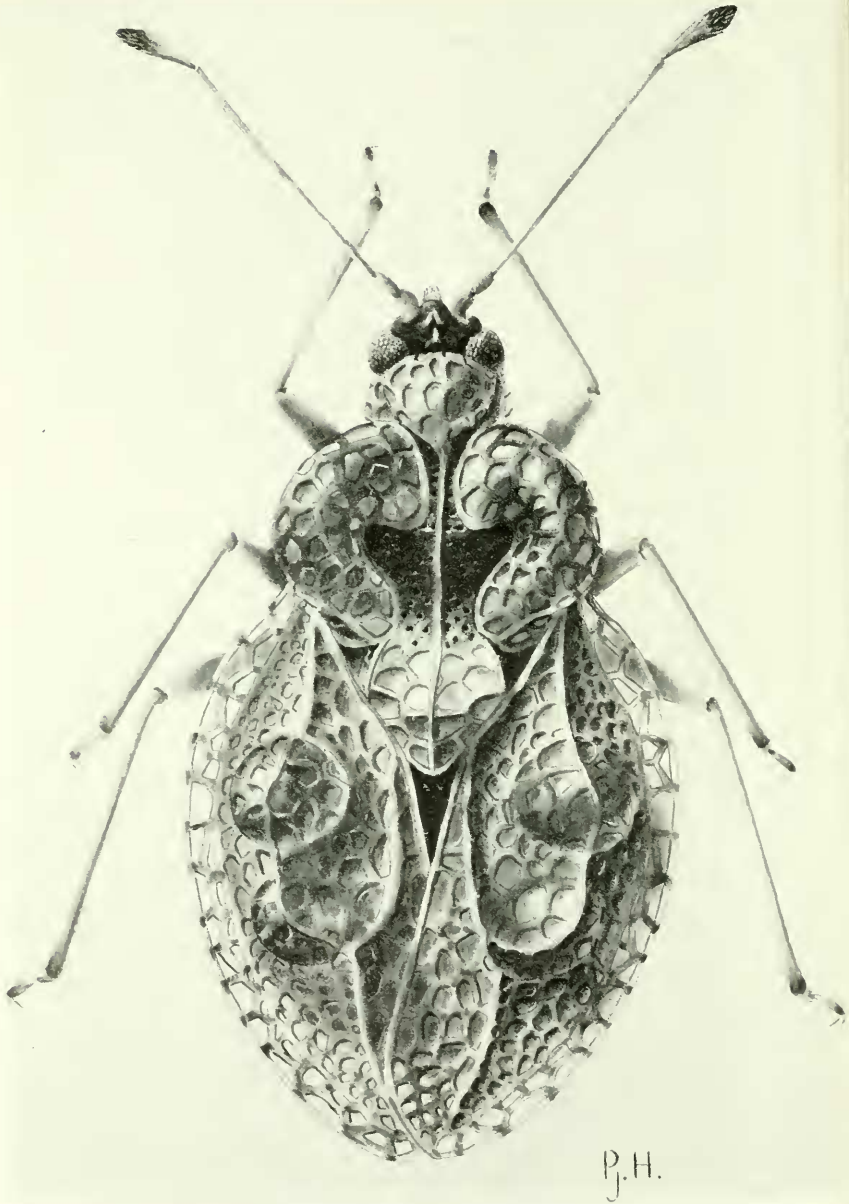
Tingis cardui (Linnaeus).



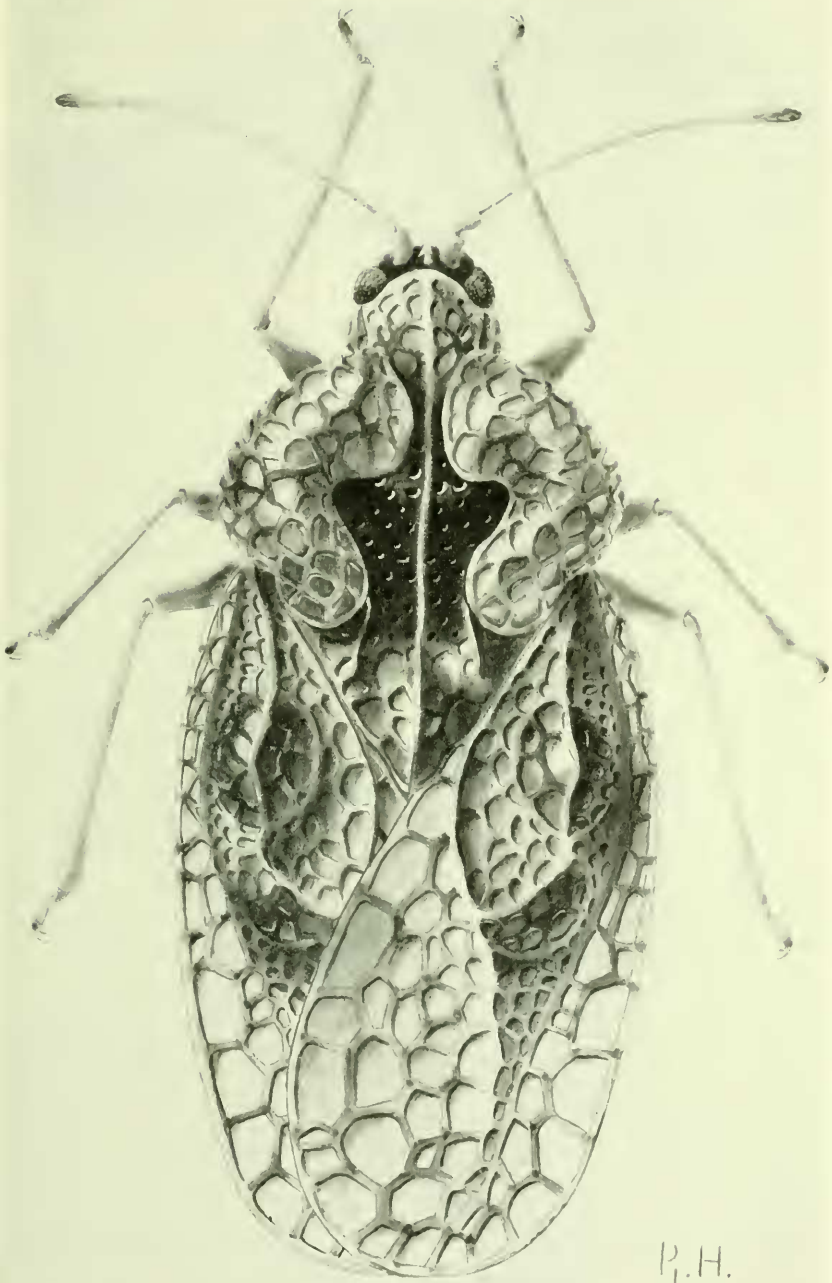
Copium clavicornis (Linnaeus), gall-making lace bug.



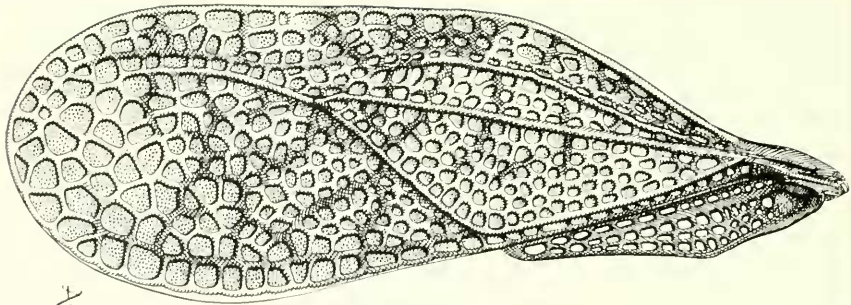
Dictyla platyoma (Fieber), type species of the genus.



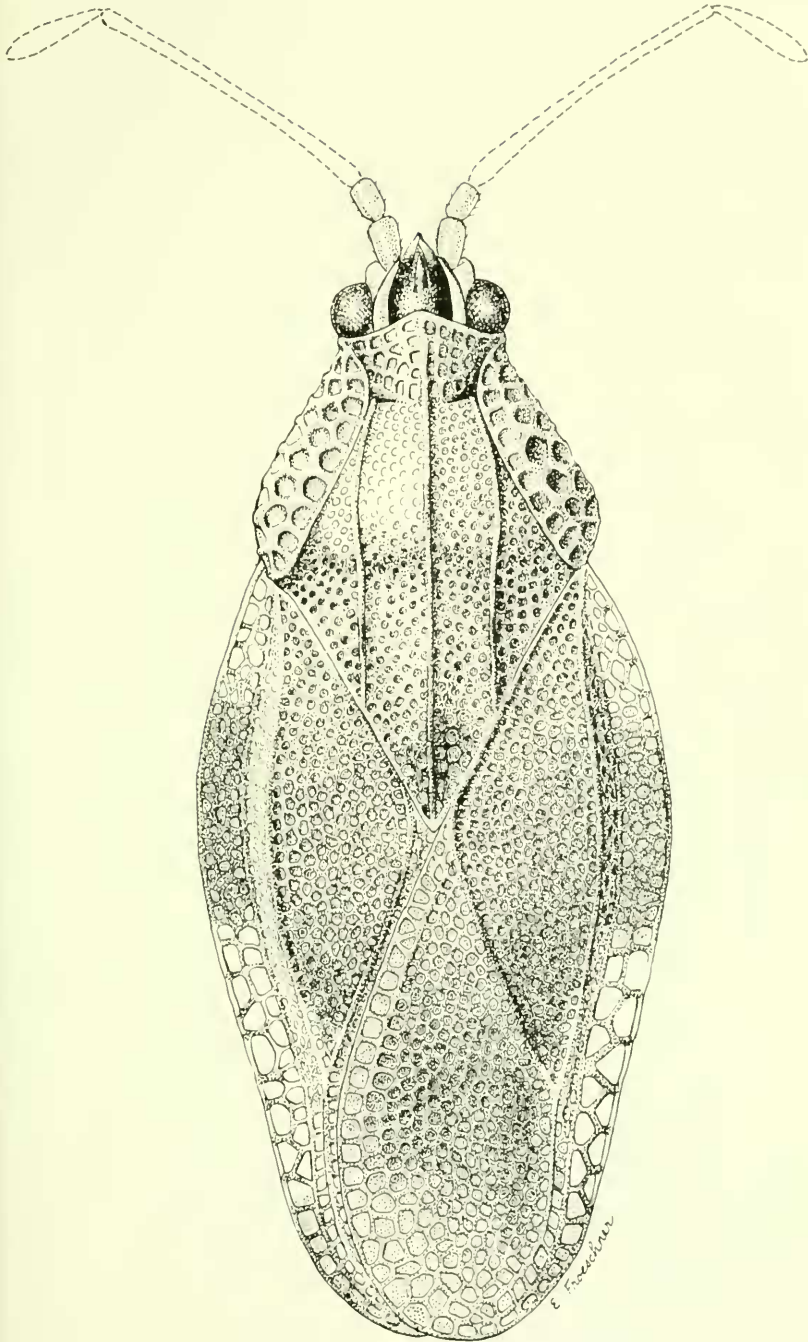
Octacysta rotundata (Herrich-Schaeffer), type species of *Octacysta*, new genus;
brachypterous form



Octacysta rotundata (Herrich-Schaeffer); macropterous form.



Penottus monticollis (Walker). The hemelytron is all that remains of the type specimen.



Physatocheila costata (Fabricius). Illustration made from Fabricius' type specimen.